NEW SERIES—NO. 12.

SELECTIONS FROM THE RECORDS

OF THE OFFICE OF THE

FINANCIAL COMMISSIONER, PUNJAB.

Published by Authority.

No. 38.

CONTENTS.

Lahore:
THE "CIVIL AND MILITARY GAZETTE" PRESS.
Contractors to the Punjab Government.
1889.

SELECTIONS FROM THE RECORDS

OF THE

FINANCIAL COMMISSIONER'S OFFICE, No. 38.

No. LXVI.—ASSESSMENT OF LAND IRRIGATED BY WELLS IN THE AMRITSAR DIVISION.

No. 39, dated Amritsar, 2nd March 1863, from the Commissioner of Revenue Settlement, Amritsar Division, to Colonel E. LAKE, Financial Commissioner, Punjab.

Amritsar, Gurdáspur, Siálkot.

As the revision of assessments in the three districts marginally given is about to come under reconsideration, and it is probable I may be called upon to pronounce an opinion, with reference to orders recently received from England, regarding the feasibility of introducing a permanent settlement, if it is discovered that the country is in a sufficiently advanced stage to admit of it without any great loss of land revenue ; I deem it a fitting time to take the orders of Government on another question of vital importance, as upon its decision depends, I think, I may say, to a very great extent, the probability or otherwise of a large surface of cultivated country coming under the protection of water by means of artificial irrigation.

2. I believe you have yourself been foremost in advocating the impropriety of taxing land *irrigated from wells* at the high rate at which it used to be assessed under the Sikh *régime*, and which system has, more or less, though of course with some modification, been adopted by Settlement Officers. I do not think there can be a doubt that well lands *have been assessed too high*, compared with canal rates, when it is considered the whole cost of prime outlay and repairs rests with the land-owners. The tendency has certainly been to tax capital, and thus discourage the construction of such important works.

3. The remedy recommended by yourself and, I believe, by others, is to ascertain and fix a moderate water-rate (ábiána) sufficient to leave full profit for the investment of capital, and at the same time to secure the recognition of the right of Government to impose a tax on the water which thus becomes a new source of wealth to the land-holders.

4. I lose no time in putting on record my full concurrence with this opinion, and I trust the remarks I now offer may be the means of eliciting some distinct order on the subject which I may be authorized to carry out when the present revision of assessment shall take place.

5. The first point that presents itself as worthy of consideration is the principle upon which a change can now be made ; and whether, and to what extent, reduction of revenue imposed on lands irrigated by wells will be necessitated.

6. I have lately had the question before me, and have made such enquiries as appeared to me to elicit information which may prove useful.

7. I am of opinion that the same principle might be adopted for the elimination of an appropriate water rate, as Government have (I understand, very lately) proposed for adoption to the gentlemen who are about to form a company for constructing irrigation canals in the Rechna Doáb.

8. The terms of the convention were to be that a subsidy would be granted, provided that the Company would agree to a guaranteed interest of 6 per cent. on the capital invested, but any profit above that sum was to be divided in moieties between the State and the Irrigation Company.

9. So with well irrigation, profit on outlay incurred up to 6 per cent. rate of interest might be guaranteed, and the water-rate proper to be imposed be calculated on half the probable dividend in excess of that rate, the estimate to be worked out on the principle of a 20 years' rate of purchase.

10. Thus a well waters on an average 10 acres, and on an average this irrigated area has been hitherto assessed at Rs. 3 an acre = to Rs. 30 per annum ; to convert this into an assessment at unirrigated rates would usually be at Re. 1-8-0 an acre, or Rs. 15. The remaining Rs. 15 may be assumed to be what is now paid as a tax on capital.

11. Now the average cost of a well in the Bári Doáb I find to be Rs. 300; an extra pair of bullocks would be required costing Rs. 30; and, say, Rs. 120 would be the aggregate increased expenditure on the land necessitated by the outlay to secure water. In all then I will assume Rs. 460 as the entire outlay for a period of 20 years.

	Rs.
Cost of constructing new well	300
,, 1 pair of bullocks	30
,, bullocks likely to be required in 20 years	120
Estimate of probable outlay in 20 years ...	460

12. Let us pass on to a consideration of the probable increase of profit created by the land being rendered more productive by artificial irrigation; what this may really amount to has yet to be discovered by further evidence. I assume, for the sake of my argument, that to convert 10 acres of unirrigated land into the protected state, the probable profit may be estimated at, say, Rs. 5 on an average, or Rs. 50 additional per annum. If we multiply this by 20 we obtain Rs. 1,000 as the gross profit, and deducting from this the maximum interest guaranteed at 6 per cent. and calculated at 20 years' purchase leaves a net profit of Rs. 460, which is equivalent to an annual profit of Rs. 23 divisible between the State and the land-owner who has improved his property. Thus, then, Rs. 12 may be deduced to be a fair water rate or sum fit to be taken by Government on an average well.

Total outlay	Rs. 460
At 6 per cent. gives	,, 27
For 20 years gives	,, 540

13. My proposal then is to tax all cultivated land as *unirrigated*, and to put on an additional burden of, say on an average, from Rs. 10 or 12 per well only as the water tax for well irrigated land.

14. The example given is intended merely to show the principle I advocate. Of course we have yet to enquire thoroughly what data can be relied upon to aid a calculation of this kind, and the application of the principle can be more correctly made hereafter. But when once a reliable average has been struck, it will not be difficult to make a classification of wells in each assessment circle, and so arrange the water rate according to the depth of well, the kind of soil, and such like considerations, and thus a sliding scale could be drawn out to serve as a guide for the purpose of future assessments.

15. Should, however, these proposals be deserving of approval, I must draw your particular attention to the fact that, if the principle be introduced to assess all lands as *unirrigated*, and to charge on well irrigated land merely a small water rate, Government must be prepared to confirm what will be considered a large reduction of the land revenue on this account.

16. I have made a slight calculation for two districts of Amritsar and Gurdáspur; assuming that instead of Rs. 15, now paid as the sum in excess of "baráni" rates, the fair water rate may be deduced to be Rs. 12 per well, as shown in paras. 12 and 13, then it will be seen that some Rs. 62,000 must be taken off the present jama on account of capital that has been taxed unnecessarily.

	No. of wells.	*Irrigated area.*
Amritsar ...	13,379	133,790
Gurdáspur ...	7,137	71,370
Total ...		205,160 acres.
		Rs.
Assuming that 205,160 acres are assessed at Rs. 3 an acre all round, of which ½, or Re. 1-8-0, expresses the *unirrigated* assessment, we have for water rate at—— per cent. ...		3,07,740
Deduct new charges for water rate at Rs. 12 per well instead of Rs. 15		2,46,195
Leaves reduction to be given ...		61,545

17. The probable decrease of land revenue, I believe, would really be considerably in excess of this Rs. 62,000 in the two districts. It may come nearer to one lakh of rupees; still whatever the excess sum may be after a searching and just enquiry, I shall be glad to learn (1) whether and on what principle I am to take up this important question, (2) whether Government is prepared for the reduction that must ensue.

18. It must be understood I am only referring to a question of how to assess lands *watered by wells*: regarding canal irrigated lands I propose very shortly to submit a separate report in reply to your No.——, dated ————————.

No. 866, dated Lahore, 14th March 1863, from Colonel E. LAKE, Financial Commissioner, to the Commissioner of Settlement, Amritsar Division.

Revenue.

Principles for assessing well lands.

In reply to your letter No. 39, dated 3rd current, I have the honor to state that, whatever may be our individual opinions in regard to the proper principles for assessing well lands, it is in my opinion wholly useless, and would be regarded as unwise to propose to Government an abstract change of principle, involving at once a heavy loss of revenue; and all that I would myself advocate in this matter would be, that whatever increase Government may obtain from other source be granted to the owners of wells by a reduction in their rates of assessment.

2. If, then, as your data for assessment accumulate, you can show that by, owing to an increase of cultivation or an increase in the number of wells, any considerable increase of revenue will accrue to Government on revision of settlement by applying existing rates, I shall be then prepared to submit to Government some definite proposition on the subject.

No. 253—1431, dated Lahore, 24th April 1863.

From—Colonel E. LAKE, Financial Commissioner,

To—The Government, Punjab.

Revenue.

Stoppage of canal irrigation by zamíndárs.

No. 1679, dated 19th ultimo, from Director of Canals, to Financial Commissioner.

No. 1097, dated 1st current, from Financial Commissioner, to Settlement Commissioner.

No. 123, dated 8th idem, from Settlement Commissioner in reply.

I BEG to forward, in original, for the consideration and orders of His Honor the Lieutenant-Governor, the correspondence noted in the margin regarding the discontinuance of canal irrigation by zamíndárs with the view of securing light assessments at the revised settlement, and to enquire whether Government is prepared to admit the principle that whatever enhancement of revenue shall be demanded in consequence of irrigation from the canal shall be levied *exclusively* in the shape of water rent. It seems to me that this principle is the only just one, and if it be adopted, it seems desirable that it be avowed at once in order to obviate the evil which Captain Dyas points out.

2. I believe that irrigation from wells may with advantage be treated on the same principle; but there is no urgent occasion at present for orders on this point, and I do not solicit any, as the subject is not yet ripe for disposal.

3. Mr. Prinsep has, in my opinion, introduced an unnecessary element of complication in adverting to the rainfall, which is quite independent of human exertions, and, therefore, does not fall within the same category.

No. 1097, dated Lahore, 1st April 1863, from the Financial Commissioner, to the Commissioner of Settlement, Amritsar Division.

Revenue.

Discontinuance of irrigation.

I HAVE the honor to forward, in original, for any remarks you may be disposed to offer on the subject, a letter No. 1976, dated 19th ultimo, from the Director of Canals, intimating that the zamíndárs have discontinued irrigating their lands with the view of obtaining light assessments at the revised settlement.

2. I would at the same time enquire whether it would, in your opinion, be possible to devise a scale of demand for the water in wells when used for irrigation, regulated with reference to the distance of the water from the surface, abundance of supply, or any other tangible physical characteristics.

No. 123, dated Camp Batála, 8th April 1863, from E. PRINSEP, Esquire, Settlement Commissioner, Amritsar Division, to Colonel E. LAKE, Financial Commissioner, Lahore.

IN reply to No. 1097, dated 1st April 1863, with enclosure, from Director of Canals, which is now returned, I have to inform you that an application was made to me by Major Dyas to issue an immediate (*ishtehár*) proclamation making known to the zamíndárs that the new principle to be adopted in the revised settlement would be to charge *all* lands as "unirrigated" in the Settlement Department, leaving the Canal Department to impose an enhanced water rate in proportion to what would be estimated as the increased fertility caused by the more certain supply of irrigation from the canal.

2. The principle is one which, I believe, we are all now agreed upon to introduce; but as no official orders had been received, I thought it prudent not to commit the Government to a proclamation, particularly as in two or three letters lately received you caution me against hasty announcement to the people of arrangements that are not quite completed.

3. I took the opportunity, however, when at Batála, to meet the Director's wishes, so far as to explain to the Tahsíldár that some such measure would very likely be adopted, and that he was to tell the zamíndárs that there was no ground for the apprehensions which are stated to have been entertained. On one occasion, when a large number of proprietors belonging to the Hasli Canal villages were present, I myself met the questions they put, and they seemed to go away satisfied that no such calamity was about to fall upon them as that they were to be charged high rates for irrigated lands in *both* departments.

4. Regarding the 2nd para. of your letter, I must inform you that I have for a long time been of opinion that it is quite possible to devise a scale of rates for water derived from wells, and I am now engaged in collecting data with a view to fix the Government demand for well irrigated lands in this way.

5. The plan I have up to the present sketched is as follows :—

(1) First to divide each district into separate circles of fertility, with reference to physical features, position, soil, climate.

(2) Then to ascertain to what extent each circle is protected by water, which is the chief cause of production. This necessitates a consideration of (*i*) water from above, rain ; (*ii*) water from below, well irrigation.

(3) To meet the first, I am having prepared, as you are aware, a map for the entire province showing the average fall of rain at places where hitherto guages have been set up. The figures, when thus arranged, will enable me to mark off the productive capacity of districts and sub-divisions of districts into *rain zones*.

(4) To meet the second, statistics collected during previous settlement are at hand, showing the number of wells, cost of construction, average depth of water in the well as also of the well itself, the nature of the springs, and number of bullocks required to work them (the wells).

(5) It is easy to show this for *every village* in a general map. I am having these maps prepared parganahwár. The entire district of Siálkot is complete. An atlas accompanies my Settlement Report for that district, which contains a map showing this information regarding each tract or circle or assessment. Similar maps for Amritsar and Gurdáspur are now being made out. Those of Batála, Amritsar, Tarn Táran and Ajnála will be ready by the end of this month, and those of the remaining parganahs perhaps by the end of May.

(6) It is easy to ascertain from Tahsíldárs and experienced cultivators—

(*a*) The average area capable of being irrigated by well of an average depth.

(*b*) The cost of primary construction and yearly repairs.

(*c*) The excess bullocks, laborers, &c., required to start the well and keep it going.

(*d*) The better crops grown on, and increased fertility afforded to, land already cultivated by the appliance of water, the new element of production.

(*e*) Calculating the gross value of the increased produce and deducting the primary cost and yearly maintenance of this means of protecting crops against drought, or failure, in a plot of land, representing the average acreage a well can water, the net assets that remain will contain what is proper to leave to the capitalist zamíndár, *plus* the proportion (whatever it may be, on any principle that may hereafter be approved of) to be taken as the Government demand, or the superior rent due to Government for the superior property thus created.

6. With all these data available, I hope to be able so to arrange the circles of taxation as to throw uniform or varied rates on the entire assessable land as *unirrigated* and distribute the rest of the Government demand. I think it proper to take, by *a scale of water rates arranged* according to facilities *afforded by rain and the depth* from *which the water is to be drawn* from that "great unseen reservoir" which Captain Baird Smith has so well described as being below the earth's surface, at all places available for irrigation, if only encouragement be given to land-owners to consult their own interest and draw from it.

7. I am convinced of this, that we are always apt to tax land watered from wells too highly, and this arises, no doubt, from our forgetting that it is not the capital of Government that is expended in creating this new source of wealth, *viz.*, "water," but of the land-owner that has been laid out, and we must be very careful not to tax this capital. That we have done so unnecessarily in former assessments is borne out by enquiry into detail such as I am now making, and the more I search into these depths the more my convictions are being confirmed. Now is the time to repair the evil, and if you will secure to me the support of Government, I trust that, by a more equitable scheme of taxation based on a scale of water rates for separate zones of fertility, the remedy may be applied which shall set free private enterprise to such a degree as was never known before; and by its being made known that a limit is fixed at so much a well of a certain class in a particular zone, and the Government demand will on no account exceed that limit, we may safely hope to see capital gravitate to the land and encouragement afforded to the construction of wells as a protection, not only of the Government revenue but of the food of the country, against seasons of drought and severe failure.

8. I shall be very glad to show you the plan upon which I am proceeding, and receive the benefit of your advice thereon.

No. 418, dated Lahore, the 12th May 1863.

From—W. Kirke, Esquire, Assistant Secretary to Government, Punjab,

To—Colonel E. Lake, Financial Commissioner, Punjab.

I am directed to reply as follows to your letter No. 253, dated the 24th ultimo, the original enclosures of which are returned herewith.

The Lieutenant-Governor has also consulted Messrs. Cust and Forsyth on the subject of your communication, and all seem to be agreed on the propriety of the land revenue being assessed at unirrigated rates, and the enhanced demand

in consequence of irrigation from the Canal being levied in the shape of water rent. His Honor himself also concurs in this view, and authorises the adoption of the principle accordingly. At the same time, however, it is necessary that the water-rent rates should be enhanced, so that, although the land revenue will be diminished, yet no loss may accrue to the Government by this change in the mode of settlement. Should any proclamation be needed to announce the proposed change in the mode of settlement with reference to canal rates, I am to request that it may be examined and approved by yourself before issue.

As regards the rates on land irrigated by wells, I am to request that you will circulate any memoranda or notes which may exist on the subject for the opinion of the several officers and of a few selected natives, and then furnish a report, with your own opinion, for the orders of the Government.

The Lieutenant-Governor does not concur in Mr. Prinsep's proposal to make the minute calculations alluded in his 4th and 5th paras.; any calculations founded on our rain guage returns, which are utterly untrustworthy, will be delusive. In like manner, the nice detailed calculations regarding wells are unnecessary, though some weight will be doubtless given to the expenditure of capital requisite where water is much below the surface and the sinking of wells difficult.

No. 275, dated Camp Batála, 22nd May 1863, from E. PRINSEP, Esquire, Settlement Commissioner, Amritsar Division, to Colonel E. LAKE, Financial Commissioner, Punjab.

I HAVE to acknowledge receipt of correspondence forwarded with your docket No. 1804, dated 16th instant, containing the final orders of Government in regard to the assessment of all lands irrigated from canal at *unirrigated* rates and the enhancement of water rates in the Canal Department.

2. I presume that the proclamation (if any is required to be issued) is to be drawn out and promulgated by the Canal Officers, and not by this office. As the canal water rates will now be enhanced, perhaps it would be better for them to issue one proclamation in which the change in the mode of assessment as well as the new water rates can be announced for public information. I could then come forward and announce the revised land revenue, which necessarily will be at considerably reduced rates.

3. In deference to the remarks of His Honor the Lieutenant-Governor in the concluding para., I shall discontinue to make any further detailed calculations regarding the pressure of existing rates on well irrigation. You are aware that I have been for some time engaged in trying to devise a scheme for the better adjustment of land and water revenue rates, with a view to relieve the very heavy rates of assessment on area irrigated from wells, and to substitute a more popular and appropriate rate, which shall partake of the form of a fixed quantity so much per well, exclusive of a light tax on all land as unirrigated.

4. The result of my enquiries, which have extended now over 70 tracts, varying in climate and physical features, in two entire districts, has brought me to the conclusion that the only correct basis in which such a system could be intelligently matured is an ascertainment of average rainfall and the depth of wells.

5. All local enquiry brought me to this point, and feeling confident that reliable data under both heads could be secured, I went on cheerfully with the task, and my exertions have so far succeeded that I was able to place before you yesterday a map showing complete information under both heads for the entire division.

6. As regards the rainfall, I have subsequently to the date of your letter to Government on the subject of canal water rates supplied you with a complete map showing the average rainfall at each of the rain-guage stations for all the districts of the Province, and in my report I endeavoured to draw attention to the fact that the returns cannot be so faulty as we had always supposed, inasmuch as the principal fact arrived at from an inspection of the map was this, that undoubtedly there *are* distinct rain zones, varying with the distance from a vicinity to the great Hímálayan range and running parallel with it.

7. For all practicable purposes, I consider the information here obtained as not only invaluable, but indispensable, in any attempt to determine what shall be a fair water rate, whether for canal or well irrigation. In my own mind, I am quite satisfied by laying down these rain zones a very material help might have been obtained, but I confess the receipt of this correspondence has quite disheartened me.

8. If the conclusion is still accepted that our rain-guage returns are utterly untrustworthy, and any calculation founded on them must be delusive, then it is useless my proceeding any further on this basis.

9. If, again, it is held that detailed calculation regarding wells are unnecessary, then it is not for me to gainsay this point. Both foundations are cut away from my feet, and I must just consent to drop present enquiries; at the same time, however, that I do so, I feel it due to myself humbly to put on record that, without looking to these the most important points, I consider it hopeless to attempt to draw out water rates that shall be either just, moderate, or free from those numerous elements which cause a mischievous inequality, and which, if not taken into patient consideration, may mar altogether the benefit expected to result out of a new mode of assessing the land revenue, which I heartily approve of, and to the best of my abilities am endeavouring to introduce on the present important occasion of revising the settlement.

No. 164—1009, dated 17th March 1865.

From—Colonel E. LAKE, Financial Commissioner, Punjab,

To—The Secretary to the Government, Punjab.

I HAVE the honor to submit, for the consideration and orders of His Honor the Lieutenant-Governor, a letter No. 41, dated 28th January 1865, from the Settlement Commissioner of Amritsar on the subject of introducing the new principle of assessing all lands as unirrigated, whether watered by canals or wells, and making a separate charge for the advantages of water. Although the records of this office show that, as regards canals, this principle has already been sanctioned by the Local Government, it will probably not be deemed out of place if I take the present opportunity of placing on record what my views are on the general question.

2. I would first draw prominent attention to the point really at issue between those who are in favor of the system pursued in former settlements and those who advocate the new plan already sanctioned by the Punjab Government for canals, and now advocated by Mr. Prinsep for wells. Both parties are agreed that, so long as land remains unirrigated, it is the duty of the Settlement Officer to fix the Government demand at one-half of the net produce, and under the old system the same rule was followed in assessing irrigated lands. By the new plan, however, instead of attempting to apportion to the Government a share of the net produce, the land is to be assessed as if it were unirrigated, and in addition an acreage is to be levied.

3. Although in some canals a water rate is levied in which some discrimination is made between inferior and high class crops, no such minute discrimination can be attempted so as to make allowance for the different degrees of productiveness which results from the supply of water, and consequently the demand on the part of the Canal Department must necessarily be in the form of an acreage; and as regards wells, if the diagrams attached to Mr. Prinsep's letter be examined, it will be found that his proposed charge for water is an uniform rate of one rupee per acre watered in the Batála Parganah, that it is nearly the same in the upper part of the Amritsar District, and that in the Mánjha there is an uniform rate for water of twelve annas per acre; so that his system also contemplates the levy of an acreage for the advantages of water.

4. In order that the differences of the two systems may be better understood, I would request His Honor the Lieutenant-Governor to look at the several printed Settlement reports of the Punjab, by which he will see that the rates paid for the advantages of water, so far from being uniform for a parganah or district, varied considerably in different villages. I extract below some particulars which I have obtained from the Settlement reports of the Amritsar Division and of the Jullundur District. As the Amritsar Division is now under revision it is appropriate to refer to it, and I have selected the Jullundur District for comparison, because I am personally well acquainted with its circumstances. The rate entered in columns 5 in the subjoined statement is the difference between the rates entered in columns 3 and 4, and shows how much per acre was charged in addition for the advantages of water.

Revenue Rates prepared by Settlement Officer.

Name of District.	Name of Chak.	Unirrigated, per acre.	Irrigated, per acre.	Rate per acre paid for advantages of water under former settlement.	Remarks.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	
GURDASPUR.	Rohelwálla ...	1 12 0	3 7 0	1 11 0	Mr. Prinsep proposes a water rate of one rupee an acre.
	Banjur ...	1 10 0	3 5 0	1 11 0	
		1 7 0	2 14 0	1 7 0	
		1 1 0	2 2 0	1 1 0	
	Dhuriwálla ...	1 10 0	3 2 0	1 8 0	
AMRITSAR.	*Upper Mánjha.*				Mr. Prinsep proposes a water rate of twelve annas an acre.
	Class I	1 6 6	3 6 6	2 0 0	
	Class IV	0 14 8	2 1 8	1 13 8	
	Central Mánjha.				
	Class I	0 13 4	1 13 6	1 0 2	
	Class IV	0 12 0	1 11 9	0 15 9	
	Lower Mánjha.				
	Class I	1 0 7	1 14 6	0 13 11	
	Class IV	0 7 5	0 15 6	0 8 1	
JULLUNDUR.	Chak Bher	1 6 0	3 8 0	1 2 0	
	Chak Phonalla ...	2 0 0	5 0 0	3 0 0	
	Chak Bungah	2 4 0	5 12 0	3 8 0	
	Jullundur	...	...	...	
	Class I	2 4 0	4 8 0	2 4 0	
	Class II	1 12 0	3 8 0	1 12 0	
	Class III	1 6 0	2 12 0	1 6 0	

5. Thus it will be seen that under former settlements irrigated lands paid rates in excess of those paid for unirrigated, varying not only in different districts but in different villages in the same chak or assessment circle. The additional rate paid for the advantages of water, which in the lower Mánjha and in the Amritsar District was eight annas per acre, amounted in Bungah and Phonalla in the Nawashahr Tahsíl of the Jullundur District to Rs. 3 and Rs. 3-8-0 per acre. The difference between the two systems is, that whereas irrigated land in Phonalla under the present system is assessed at Rs. 5 per acre, Mr. Prinsep's plan would be to charge for it Rs. 2 an acre as unirrigated and an additional rupee an acre for water, making a total of Rs. 3 an acre, and making a reduction of Rs. 2 for every acre of irrigated land. I will not assert that, with the view of equalising the demand with other parts of the country, that some reduction may not be called for at the next settlement : at the same time I can testify from personal knowledge—and His Honor the Lieutenant-Governor will probably bear me out—that the villages about Phonalla and Bungah are in a highly flourishing condition, and that the revenue has been collected without the least difficulty during the time I have been in charge of the Jullundur Division. I can also certify that the high rate paid for water has not discouraged the construction of new wells, for I find that out of 72 new wells constructed in Tahsíl Nawashahr during 1862-63, no less than 46 were in thána Bungah, throughout which high rates prevail for irrigated lands, and in the following year out of 57 wells constructed in the parganah Nawashahr no less than 42 were in thána Bungah. I draw attention to these circumstances, because if the old principle was defective where it was carried to excess, as in these tracts, its mischievous effects ought to have been perceived by this time.

6. So far, however, from regarding the old principle as defective, I think the safest and most intelligible plan to go upon is to regard the land revenue as a tax upon the net profit derived from land, and to arrange that the incidence of

that tax shall be the same for irrigated as for unirrigated land; that is, if the revenue taken from an acre of unirrigated land is half the net profit, the revenue paid by irrigated land should also be half the net profit. It is well known that the productiveness of irrigated land in the same district, and even in the same parganah, varies very much. I may instance the Jullundur District and the Batála Parganah, in one part of which the rent rate for an acre of sugar-cane is Rs. 24, while in another part it is only Rs. 8. The command of water which in one locality makes irrigated land twice as productive as the same land, when unirrigated, in another locality increases its productive powers in a much larger ratio, and it was with due regard to these different degrees of productiveness that such varying rates were fixed in former settlement.

7. I am prepared to admit that those rates were often fixed so high that capital was unduly taxed: in some cases, as noted by Mr. Prinsep in his letter, the area irrigated was over-estimated; in other cases sufficient allowance was not made for the great expense which has to be incurred in working a well, particularly when the water was at a great depth below the surface. Still I consider the principle of the old system is fairer than of the new one, the effect of which latter, I anticipate, will be to give disproportionate relief to the owners of the best class of irrigated lands who will pay income-tax (so to speak) at a lower rate than the owners of unirrigated lands and of irrigated lands of inferior quality. If the latter pay one-half their net profits as an income-tax to Government the former will pay much less than that rate.

8. Another drawback to the system of realizing through the Canal Department the enhanced revenue which may be demanded in consideration of additional productiveness caused by land being properly watered is, that when the rainfall is favorable and no water is taken from the canal the Government obtains no portion of the enhanced profits which accrue under these circumstances to the landholder.

9. On the other hand, it is true that when a canal is first commenced, and before irrigation reaches its limits, there appears to be no alternative but to realize through the Canal Department, and in the form of a water tax, some portion at least of the enhanced revenue due to the supply of water; but I would not advocate perpetuating such an arrangement even when water is supplied by canals, and much less would I extend the principle to lands irrigated by wells of levying an acreage in lieu of taking a share of the enhanced profits.

10. For, as I have shown above, if any dependence can be placed upon the enquiries of former Settlement Officers, the water rate due to additional productiveness should vary in different villages. It is obvious that such discriminating rates could not be levied by the Canal Department, the successful operations of which require that there should be no great variety of rates; on the other hand, it is essentially the work of the Revenue Department to determine what is a suitable water rate for each locality; and if the additional revenue due on this account is incorporated with the Government demand, it can be levied without trouble or complication of any kind.

11. As regards lands irrigated from wells, I see no reason for altering the principles of the old system; and as regards lands irrigated from canals, I would only recommend the adoption of the new plan until, in consequence of irrigation reaching its limits, we are in a position to introduce the system of lump-sum payment, which would include every charge due to the Canal and the Revenue Departments. Until this can be done, I think it would be premature to introduce a perpetual assessment in tracts irrigated by canals.

12. As canals are constructed by the outlay of Government capital, we are entitled in justice to demand that the prescribed share of the increased profits resulting from the supply of water should be realised by the State, and this cannot be ensured under the present system of payments, because under the acreage system a low uniform rate must be fixed which will not press too highly upon lands of the least productive kind. To illustrate my meaning: if it be assumed that Rs. 2-6-8 per acre per annum is the charge to be levied on the Bári Doáb Canal for increased productiveness, it is obvious that such a rate would press, "*cæteris paribus*," like the Mánjha, highly in some tracts and lightly in others,

like Bungah and Phonalla in the Jullundur District; and in fixing the rate it would be necessary to have regard to the circumstances of average, not to say inferior tracts, instead of the more productive localities.

13. I have assumed above that Rs. 2-6-8 per acre per annum is the rate due to additional productiveness on the Bári Doáb Canal, because this is the rate charged for "dál" irrigation, or where water is raised by labor; and although the rate for "tor" is double this, I assume the additional charge is made on account of the saving to the land-holder, resulting from his not being obliged to construct a well or to keep up an expensive establishment for working it. But here, again, it is obvious that an uniform rate cannot meet the varying circumstances of different localities; for a man who is spared the expense of constructing a well forty feet deep, and which can only be kept working by very strong and expensive bullocks, evidently must save more than the man in whose village water is found at twenty feet below the surface, and whose well can be worked by light and inexpensive bullocks. It is also obvious that even where water is raised by labor, the expense varies very much in different localities according to the mode employed, but the canal system does not admit of the application of discriminating rates in such cases. Viewed, therefore, under every aspect, I regard the present system of levying water rent by Canal Officers at rates which, for departmental reasons, cannot be discriminating as a makeshift which only ought to be tolerated until a better and more perfect system can be introduced.

14. While on this subject I ought, perhaps, to draw attention to the fact that the relative rates of dál and tor irrigation vary considerably on different canals. Thus the rate for "dál" irrigation which on the Bári Doáb Canal is one half of tor, on the Eastern Jumna it is one-third. (*Vide* Supplement to the *Gazette of India*, 31st December 1864.) On the Western Jumna Canal inferior crops irrigated by the flow of water by tor irrigation pay ten annas an acre, while for dál irrigation eight annas an acre are charged.

15. Another objection I have in the case of wells to Mr. Prinsep's proposal is that if we interfere arbitrarily and fix the proportion of the Government demand which irrigated lands shall pay, we weaken the principle of village unity and responsibility. Hitherto the system has been for the Government officers to fix the total demand to be levied on each estate, and to allow the shareholders to distribute the demand among themselves as they thought fit. By fixing the demand upon the irrigated area, we treat it as if it were a separate Mahál, and in cases where the Settlement Officer from miscalculation of assets fixes the demand at too low a sum upon the irrigated area, great injustice will be done to the owners of unirrigated lands.

16. I highly approve of Mr. Prinsep's proposal to fix rates on irrigated lands with due regard to the depth of wells; but I observe in the diagram which accompanies his letter, that in the Batála Parganah, and in the Mánjha, for wells forty feet deep he proposes a higher rate than for wells that are twenty and twenty-five feet deep. He does not explain the grounds for this, which appears opposed to his own views.

17. Owing to the statistics of rainfall in the Punjab being far from reliable (in my opinion) I should be sorry to draw from them any deductions that were not of a very general character, and I would not trust to the details exhibited for each locality. Thus it may be safely assumed that the rainfall is greater in the Batála Parganah than in the Mánjha, but that in a series of years the average fall would in the former be above 30 inches and in the latter above 20, I should not be disposed to admit unless better data were obtained than are at present available. That the rainfall is one out of many considerations to be taken into account in fixing revenue rates I would readily admit, and, so far, Mr. Prinsep's division of the country into rain zones is of use; at the same time as regards irrigated lands it must be borne in mind that, "*cœteris paribus*," profits are relatively greater in tracts in which the rainfall is light than in those in which it is heavy, and it must have been observed everywhere during the late famine that the deficiency of the rainfall gave an extraordinary impulse to the constructions of works of irrigation.

18. Assuming that his settlement should be a perpetual one (which, however, I do not advise) Mr. Prinsep suggests various expedients for maintaining an equality of rates, so that those who construct wells after the settlement has been completed may not be in a better position than the owners of those wells which were in existence at the time of settlement. The best arrangement appears to me to rule, that although the demand is fixed in perpetuity upon the whole estate, the proportion of that demand to be paid by each shareholder is liable to revision and re-adjustment. Thus in the case of a new well being dug, the owner, in consideration of the capital expended by him, might be allowed to pay at unirrigated rates for a series of years, at the end of which he should pay at the same rates as other irrigated lands of the same description in the village; the additional sum thus realized might be treated as an item of "shamilát," belonging to the whole community, to be divided amongst shareholders according to their separate interests, so as to avoid an entire recasting of the village papers. Should, however, the new wells sunk be very numerous, then the revenue to be paid by each shareholder might be revised, and a fresh khewát prepared.

19. In conclusion, I have to observe that although my views differ from those expressed by Mr. Prinsep on many points in his letter, I cannot but appreciate the pains and the labor he has devoted in the preparation of the diagrams which accompany his letter and in the collection of statistics, and which, apart from the general question here discussed, are in themselves very valuable.

No. 41, dated Camp Bal, Amritsar, 28th January 1865, from E. Prinsep, Esquire, Settlement Commissioner, Amritsar Division, to the Secretary to Financial Commissioner, Punjab.

I beg to call your attention to my No. 275, dated 22nd May 1863, and previous correspondence * on the object of introducing the new principle of assessing all lands as *unirrigated*, whether watered by canals or by wells. The revision of Settlement has now advanced so far that it has become absolutely necessary that the orders of Government should be received disposing of the entire question.

* 1. Settlement Commissioner's No. 39, dated 2nd March 1863, to Financial Commissioner.
2. Reply of Financial Commissioner, No. 866, dated 14th idem.
3. Financial Commissioner's No. 1079, dated 1st April.
4. Reply of Settlement Commissioner, No. 123, dated 8th April.
5. Financial Commissioner's docket No. 1804, dated 16th May, with correspondence from Punjab Government.
6. Reply of Settlement Commissioner, No. 275, dated 22nd idem.

2. As regards irrigation from the canal, Government has approved of the principle in the Secretary's letter No. 418, dated 12th May 1863, to your address, forwarded under your docket No. 1804, dated 16th idem, and in the assessments now going on we are carrying it out.

3. In the same correspondence you will remember that your predecessor reported to Government that he believed that irrigation from wells might with advantage "be treated on the same principles," but he did not then press this aspect of the question "as the subject was not then ripe for disposal." In the reply received in the above quoted letter (para. 3*) His Honor the Lieutenant-Governor directed that any memoranda or notes that existed on the subject should be circulated, and the opinions of selected officers be taken, after a consideration of which the orders of Government would be communicated.

*Financial Commissioner's No. 253, dated 24th April, to Government, para. 2.

4. Subsequently I addressed you in my No. 275, dated 22nd May, and thus the matter stands.

5. Since this correspondence took place, the Supreme Government have issued orders regarding the principles that should be pursued in introducing a permanent Settlement into the North-Western Provinces, and among the points adverted to I find (para. 23*) this very question considered, and certain instructions are laid down for overcoming to a slight extent the inequalities that must arise in assessment of lands irrigated from wells. The evil we are all trying to meet is there openly admitted; the remedy proposed is at best a makeshift, and totally insufficient to bring about that proximate equality which it is the wish of Government to secure when making assessment of so important a character as that of a permanent one.

* No. 544, dated 8th June 1864, to Secretary to Government, North-Western Provinces.

6. From the commencement my attention has been directed to devising some plan by which this very desirable result can be brought about, and which should be the first object aimed at in all settlements, *viz.*, the best way of fixing an equitable assessment that may be just, reasonable, and moderately uniform in pressure in tracts of country possessing the same features; that should it be the intention of Government to make it permanent, its chief recommendation may be that it may not lead to great inequalities.

7. As regards canal irrigated lands, the Government avowal of the new principle enables us to get over one chief source of inequality. By assessing *all land as unirrigated*, and leaving to the Canal Department to take by enhanced rates the revenue that it is entitled to

owing to increased fertility caused by facilities of irrigation, the pressure of taxation will press on all alike, whether the land was irrigated from this source before the Settlement or will in future be irrigated after the Settlement.

8. But we have still to make some better provision for *land irrigated from wells,* and it is with a view to elicit the policy of Government that I now address you in the hope that this may now be finally disposed of.

9. I have made every possible enquiry, collected data, drawn conclusions from such data, and have to a certain extent and to the best of my ability put these conclusions to a good test by applying the new water rates in the assessment now being carried out. Comparing the new results with the principles and results adopted before, I am more and more convinced that the old principle of fixing *cháhi* rates on quantity of area recorded by patwárís as the extent of land irrigated during the one year when measurements are made is altogether vicious, wrong in principle, full of errors, and productive of great inequalities.

10. Apart from the liability to error in distinguishing what field should be recorded as "watered constantly," what is only occasionally watered, there is a tendency to temptation in the agent to deceive or exaggerate; and if the season had been a dry one, the area would at all times be exaggerated; if a good one, then perhaps a small area would appear as the result of recording one year's status.

11. That these discrepancies have occurred, and to a very large extent, I can show by a reference to the areas entered as cháhí in the No. II Village Statements upon which the revenue rates were applied, and a standard jama worked out which guided our officers in fixing the jama finally adopted.

12. In going over the jamas of three parganahs in Bárí Doáb, I find the universal effect of last Settlement has been to exaggerate the area capable of irrigation to such an extent as to lead in very many villages to the imposition of a jama which has been very oppressive. It can easily be conceived what effect the additional charge of Rs. 20,769 on this excess area, over and above the unirrigated rate, would be even in a general view, when to this is added the fact that different water rates were not applied to wells as they stood in villages. With reference to water being at a greater or less depth from the surface or to average irrigable surface according to tracts, not that the villages were left to apportion as much as of the jama fixed on the whole estate to unirrigated area, and to the entire number of wells and then to distribute that water jama, it can be imagined how great the inequalities would be not only in tracts, but on individual villages themselves.

Parganahs	*Area recorded as cháhi at last Settlement.*	*Average irrigable area as now deduced.*
	Acres.	Acres.
Amritsar ...	55,583	47,888
Tarn Táran ...	49,956	34,538
Batála ...	67,151	50,023
Total ...	172,960	132,449
Difference ...	40,511	

13. To prevent this in future the plan I have resorted to is this: certain sections of country (generally one in each parganah) are taken; the fluctuations in depths of water are marked off by lines; an average well is assumed for each tract within these fluctuations, its depth marked down, together with the average area each such assumed well is known to irrigate in an average year. There is no difficulty in ascertaining this, for it can be learnt readily from intelligent zamíndárs.

14. The sections made out on an assumed base line laid down with reference to rainfall, a sliding scale can easily be made out of the water-rate proper to be charged for the wells in each tract as an average water jama to be applied to the number of wells in each village. This water revenue, when added to the actual jama worked out by unirrigated rates, at once gives the real and full jama of the village, and obviates all the evils above pointed out.

15. The accompanying diagram and maps will show at once how the sliding scale was fixed in parganah Batála. There is nothing very elaborate in it. The Settlement Superintendent collected the materials; the Extra Assistant Commissioner arranged and attested them; and the reduced map is the work of a person employed in this office.

16. As regards the elimination of the water rate, all that was necessary was to concentrate enquiries in one section or parganah. Batála was the one chosen. Three tracts were taken differing in the extremes of depth and irrigable surface. The average area being ascertained, it was cropped in the way usual with the people (there seem to be fixed rules for this); the gross produce jama was determined from the application of average price current of 30 years to the yield for an average year; the cost of production, outlay of capital and yearly outlay were then deducted; and from the net produce which remained a sum was fixed with the aid of intelligent zemíndárs, and afterwards attested by Tahsíldár and Extra Assistant Commissioner, amounting to a proportion short of half of that net produce, as the water rate which might be equitably demanded, and be at the same time so moderately light as to meet general approval.

17. This calculation then gave the water rate for three or more wells in tracts differing in depths in one section to graduate a sliding scale from the same became a matter of ease. The scale for one section or rain zone being determined in a Doáb situated like that of the Bárí Doáb, it became easy to make out similar sliding scales for other parts of the

country which were nearer to, or farther from, the hills ; for we all know that here fertility is entirely dependent on two considerations—of rain and soil—parganahs being worse and worse in respect to these two aspects as we go lower down in the Doáb (see rain map accompanying).

18. So far, then, enquiries show that a sliding scale of water rates for wells *can be worked out*. The great fact that has come to light is this, that, whatever the area may be, —a well in an average season can water all the year round,—the rate generally stands at about Re. 1 an acre. Abundant testimony has established this point to my complete satisfaction that a charge of Re. 1 an acre for land watered from a well over and above the ordinary rate for unirrigated is equitable, light, and sufficient. Anything above this would be unreasonable ; and up to this limit the people have everywhere assured me would be considered a boon and would leave ample margin in return for the outlay of capital.

19. For all assessment purposes, I find these sliding scales quite successful in enabling me to fix a separate jama on irrigated from unirrigated land. Indeed I have worked them out, and all my new assessments are being carried out on this principle.

20. It is true that the introduction of the principle will necessitate an abatement of a certain amount of revenue, but not to the extent I had expected. But putting all things together, the increase from other sources, from area and improved productive capacity, when brought into the account, will be a set off against this ; while it must be remembered that a certain amount of general reduction of revenue must take place, owing to the proportion of the net produce being lately reduced under orders of Government from the limit of two-thirds to that of half. When all these considerations have been made, the actual financial result, or the decrease in the land revenue, will not be so great as that Government will not accord to it a ready sanction to gain so important a measure as that of an equitable permanent assessment effected with a considerable alleviation of taxation on enterprise and capital.

21. Should, however, it be objected that Government is not prepared to make such a sacrifice as is here required, then as a part of this principle I beg to make the following suggestions :—

First.—That the water rates, after thorough enquiry and confirmation by Government, be *declared fixed for ever*.

Second.—That if existing wells should collapse or become useless, then the water rates shall be *remitted till* a new well is made.

Third.—That after the Settlement, whenever *new wells* are made and come into use (after a period of grace, say three years), the same rate as now fixed for that village will be fixed for the water, and no more.

Fourth.—That separate pattahs be given to the holder of each well for his water rate, guaranteeing to him that, as the unirrigated land is assessed permanently, so his water rate is fixed for ever, and will never be liable to enhancement either by Government or in the village "Bach," but the pattah may be cancelled on the well collapsing. But that if the same person wishes to secure his permanent interest, he can only do so when on a new well being made he shall take out a *new pattah* at the same rate, to have effect after the period of grace has expired.

22. These suggestions, it will be seen, take in the present status and the future, and have this advantage, that a plan is afforded by which a present surrender of revenue will be fully made up hereafter by constantly increasing revenue derived by tax on water which may be looked upon as a mere source of wealth in a small share of the benefits derived from which Government is, in equity, certainly as much entitled to as in the discovery of a mine.

23. I know the objection will be put forward—why harass the people ? why not let them have the full benefit of future outlay of capital ? If the boon of a permanent settlement is given, the people will never have the full advantage of it, nor feel themselves free in making improvements, if there is to be an application for new well pattahs which will lead to interference and, very often, to evasion. All this is true. If we wish to be consistent in meeting this objection, then we must do either one of two things—

(*a*) either set free the water tax on all the land *at present irrigated*, so that there may be no inequalities hereafter ;

(*b*) or, if we are unwilling to surrender so large a revenue now, we must place parties *making future wells* on the same footing with those who are to be now so taxed.

24. The first alternative has been negatived by the Supreme Government in para. 23 of the letter quoted above. It has been ruled by the highest authority "that to do away altogether with the high rates which have been paid on well irrigated land from time immemorial will lead to an unnecessary sacrifice of revenue." There is no other alternative then, but to fall back upon the second.

No. 544, dated 8th June 1864, to Secretary to Government, North-Western Provinces.

25. I see no such difficulty in putting this into force but what it can be obviated. First of all, there is the fear of evasion. Will the zamíndárs come forward and take new pattahs? I believe (1) if the rates in the declared sliding scales are really *light*—by which I mean if they are really so low as to be much below the average and what has ever been hitherto demanded—so low as to be looked upon in the light rather of only half the old tax, which is what Government should be contented with; (2) if again these light rates be now fixed *once and for ever*, so that all may feel sure they are as permanent as the unirrigated jama fixed on the whole village; (3) and again if it be proclaimed that the water rate fixed in the pattahs will *never be liable to enhancement* in the periodical changes of assessment *within the village "Bach,"* but that that assessment shall only be thrown on land as unirrigated: if, I say, these three conditions are fulfilled, then I believe there will be an eager desire, instead of evasion, on the part of persons making new wells to come forward of their own accord to take out the pattahs, which will secure to them such important and lasting advantages.

26. Then if there was evasion, there are the Tahsíldárs, Patwárís and head Lumbardárs on the side of Government ready to bring the matter to notice.

27. But if it be urged that all this will lead to fluctuations in revenue, changes in Kistbandi, increase of accounts and reporting, the remedy is an easy one, by taking the account of all such new wells once in five years instead of every year, and extending the period of grace from three to five years. A system has to be devised for keeping up the patwári records by overhauling them once every five years; the pattahs could then be granted at the same time.

28. However, I set no account on the working of the plan as regards the future, because I have sufficient information to convince me that the three conditions mentioned in para. 25 would be looked upon as so great a boon that the agricultural classes would in effect work with, and not against, Government.

29. Of course, I do not for one moment wish to maintain that the first alternative would not be the best, *viz.*, to emancipate all future wells from taxation as far as the interests of those are concerned who hereafter shall sink their money in such improvements. But I shrink from the consequences this will bring about. There will be glaring inequalities all over the country, indeed in every village; and who will be able for one moment to defend that policy, or the consistency of it, which taxes the preceding generations simply because they have had the misfortune to make wells, while unborn generations are free from all taxation now and for ever. The people would be the first to complain of the injustice that would arise on all sides.

Para. 23 of Supreme Government despatch.

30. As for the remedy that is offered by way of compromise, *viz.*, "carefully to assess land possessing facilities for irrigation with some advertence to this advantage, and by guarding against the incidence of excessive taxation on wells already at work," it might be all very well in theory; but who can do it without imposing excessive taxation on unirrigated land, and, at the same time, giving insufficient relief to those who bear the present burden on irrigated lands.

31. The foregoing observations will show you that there are two principles placed in contrast. By the one, *viz.*, that now recommended for the Punjab, great advantages will be derived: (1) a more approximate equality in the assessments, which shall hold good now and hereafter; (2) an immediate great release of very objectionable taxation on actual capital; and (3) an ever increasing small revenue in the future, which will more than make up present losses on this head, and serve as an argument against those who object to permanent settlement at all, because of the great surrender of all future revenue that it entails.

32. By the other, Government avoids certainly an immediate abatement of revenue, but at the sacrifice of all principle and consistency. It lays itself open to the charge of injustice; knowingly allows inequalities in assessment which can be avoided; and gives a handle to the people to complain, which they will be the first to avail themselves of when they see the glaring differences in taxation, certain to arise some day.

33. I state both plans, leaving it to Government to decide which shall be avowed. But should there be a difficulty in selecting one of these two, then I beg to draw your attention to a third, which is a clever solution. I am indebted to my Assistant, Mr. Lyall, for the very valuable suggestion reported in the accompanying letter* sent in original. It seems to me to take us exactly midway between the two principles, combining finality without surrender of existing revenue, aimed at by His Excellency the Viceroy, the gradual escape from inequalities of assessment, which I consider one of the most important objects of a *permanent* settlement.

* No. 99, dated 20th November 1864, to my address.

34. His plan is this: to maintain the sliding scale system of water rates here pursued on *all wells now in existence*, but to avoid future interferences and future taxation *as from Government*; to allow the village the benefit of periodical redistribution of the water rate jama imposed at Settlement, so as to include new wells when they are made (after a period of grace, say three or five years, for starting the well). In this way all the wells would fare alike; the burden, which cannot be given up by Government because of the sacrifice of revenue it would entail, would be borne by all alike, and would be higher and lighter as more wells were made, till some day it would either become extinct, or be so small in amount on one well as scarcely to be looked upon as a tax at all.

35. Thus, to take an example: suppose a village having now five wells, rated at Rs. 20 each, giving Rs. 100 as the proportion of jama over and above unirrigated rates. In 1870 different parties chose to make five new wells giving ten wells; the rate distributed over all will reduce the burden to ten, or one half. In 1875 other five wells are made, giving 15 wells; the rate is further reduced to a fraction above Rs. 6, or to one-third, and so on. Being borne by all alike, there would be no inequalities, all complaints would be hushed, the unavoidable tax on capital would merge into a small bounty, and a direct encouragement would still be held out to all to invest capital which was so evidently for the benefit of the individual as well as for the support of the common weal.

Year.	*Water Jama.*	*Rate*	*Wells.*
1865 ...	100 ÷	20.0 =	5
1870 ...	100 ÷	10.0 =	10
1875 ...	100 ÷	6.6 =	15

36. Mr. Lyall, I perceive, goes further and thinks this mode of enfranchisement might not only be confined to within individual villages, but might be extended, say once in five years, over a whole tract, say where the estates are similar in feature, or the uniform water rate has been applied. Certainly it would lead to a more equal distribution of an unavoidable tax, but I think it would be better to confine it to within the village, as then the industrious would have encouragement to greater industry, and it would be easier to carry out in practice.

37. It will be seen that this plan will effectually fall in with the views of those who think that it is needless to interfere in villages on this account after a permanent settlement has once been made; but all idea of future revenue to come to Government must be abandoned.

38. I beg you will place this report before His Honor the Lieutenant-Governor with your opinion, that I may have explicit instructions as to which of the three plans is to be adopted in regard to well irrigation assessment in the revision of Settlement in this Province.

No. 169—1049, dated 20th March 1865.

From—The Secretary to Financial Commissioner, Punjab,

To—The Secretary to Government, Punjab.

I OMITTED in my letter No. 164, dated 17th instant, to bring to the notice of His Honor the Lieutenant-Governor that the proposed system of assessing all land watered from the canal as unirrigated, and making a separate charge for water, will seriously diminish the income of many jágírdárs whose villages are situated within reach of the old Haslie Canal, the irrigated lands of which at the last Settlement were assessed at higher rates. I would instance the estates of the Majíthia Sardárs and of the Sindánwála Sardárs, and there are several others of less note. By our resumption and Settlement operations their income has already been very largely reduced, and they will doubtless consider themselves seriously aggrieved if the new system is put in force in their villages, unless it be determined to compensate them in some way by payment from canal revenue, or to allow them to realize their revenue in kind: but this latter expedient is not far from serious objection.

2. Even as regards other jágírdárs whose lands are newly brought under canal irrigation, it would appear that in equity they will be entitled to recover from the Government some portion of the canal revenue which may be realized under the new system from irrigated lands in their jágírs. In passing orders upon my previous reference, I request His Honor the Lieutenant-Governor will also take this matter into consideration.

No. 292—1766, dated 4th May 1865.

From—The Secretary to Financial Commissioner, Punjab,

To—The Secretary to Government, Punjab.

IN continuation of my letter No. 169, dated 20th March 1865, I beg to forward a further reference* from the Settlement Commissioner regarding the new principle adopted by him in the assessment of lands irrigated by wells in the districts of the Amritsar Division. Although, for reasons given in my previous letter, I am not in favour of this new principle, I think it is due to Mr. Prinsep that he should be informed officially that His Honor the Lieutenant-Governor was cognizant of and approved of the special measures taken by him in regard to the taxation of irrigated lands, and that as an experiment has been allowed to complete his assessments upon the principle adopted by him, thus the advan-

* Letter No. 161, dated 27th ultimo.

tages of the two systems will be tested by actual experience. It is scarcely fair that the great responsibility of inaugurating and carrying out so radical a change in the assessment of lands should be thrown upon an officer of Mr. Prinsep's standing in the service, and it is obvious that to enable him to redeem his promise of completing his Settlement within the next few months, he ought not to be called upon at the eleventh hour to re-cast the whole of his assessment data.

No. 161, dated 27th April 1865, from EDWARD PRINSEP, Esquire, Settlement Commissioner, Amritsar, to the Secretary to Financial Commissioner, Punjab.

I HAVE just (as it were by accident) been favored with a perusal of your Circular No. 79—3933 of 1864, containing the orders of Punjab Government on exemption from irrigated rates of lands for which pattahs have been given under Board's Circular No. 41 of 1850, and the terms under which this exemption is to hold good.

2. The Commissioner of this Division has forwarded for perusal the correspondence that has passed on this head in his office. I find it reported that the orders contained in the Circular are being carried out by the Settlement Department.

3. Now it is proper that I should lose no time in informing you that as yet *no* such steps have been taken to enter direct stipulations in the village administration papers; that "the *bach* will *not* be raised on the constructors and owners of the well" for the period specified in such pattahs, for the simple reason that, till four days ago, I was not even aware of your Circular. No copy was sent to this office, and no instructions have been received requiring me to do so.

4. To prevent misconception, then I beg to be favored with explicit instructions as to what I am required to do.

5. You are aware that the principle which has been introduced by me, under full knowledge and approval of your predecessor, in regard to taxation of well irrigated lands, requires that the water rates and land revenue be separately calculated, charged, and shown in my assessment papers—*i. e.*, all land attached to the well is charged at *unirrigated rates*, and on the number of wells in existence a certain low water charge is to be fixed with a view to give relief to property created and maintained by private industry and capital.

6. In like manner that water charge being fixed very light, is to be applied to all wells that may be newly made or be brought into use hereafter, our object being to equalize as much as possible the present and future burden of revenue on irrigated land.

7. Though the plan will necessitate a certain surrender of immediate revenue on land at present irrigated by wells, it is not difficult to see that an uniform water rate being charged in this way for tracts in which the depths of water and other features are the same, present loss of revenue will be amply compensated by fresh pattahs being given for future wells, which will every year bring an increase of jama into the treasury; and further the water rate being *fixed* once for all for each tract, and fixed so *low* as to be looked upon as merely a light tax, it is believed a great stimulus will be given to the more rapid construction of wells on all sides.

8. If Government is not favourable to the additions of future small sums of water revenue coming in from the grant of pattahs for future wells, because of the labour entailed in keeping up accounts in the Tahsíls, or because the people may be harassed by such enquiries, then an amendment of the plan has been submitted in my No. 41, dated 28th January 1865, whereby future increase of jama may be abandoned as far as Government is concerned; but redistribution every five years of the water jama is to take place, so that as new wells are made and brought under the *bach*, the new water jama shall be applied to the constant decrease of the extra assessment fixed in the *bach* in irrigated lands. Thus in course of time the water assessment in the village may be expected so to decrease as to become a merely nominal payment to Government, or be remitted altogether by the common exertion of all who held such lands, and in a way that shall allow the burden of taxation to be always more equally distributed.

9. Now, the object of the present reference is this. If the principle we are now pursuing is to hold good, then your Circular will scarcely apply. Some new instructions will have to be issued as regards the districts of this Division. I wish, then, to know what steps I am now to take in reference to this Circular. An early reply is solicited, as we are now far advanced in the last stage of the preparation of the records.

10. It would very much facilitate the progress of work if definite orders can be passed at once on my letter No. 41, dated 28th January above referred to, which explains the new system of water taxation that has been introduced. I believe you are averse to it, and this makes me more anxious to receive final instructions by an early date. If there is any change, it will involve my going over the assessments of all 12 parganahs in this Division, and the whole work of the Settlement will be retarded in a way that will be attended with very serious consequences.

No. 374—3254, dated 25th July 1866, from the Secretary to Financial Commissioner, Punjab, to the Secretary to Government, Punjab.

No. 111, dated 1st ultimo, from Commissioner, Amritsar.
No. 2520, dated 12th idem, to Settlement Commissioner.
No. 410, dated 6th current, from Settlement Commissioner.
No. 3253 of this date to Commissioner, Amritsar.

IN continuation of No. 164, dated 17th March 1865, submits, in original, the correspondence noted in the margin, in regard to the assessment of lands irrigated by wells and canals, and begs to point out that it is very desirable that His Honor's instructions on the general question should be no longer delayed, as, apart from questions which will be frequently raised in districts which have been settled on the new principle advocated by Mr. Prinsep, a revision of assessment will have to be effected shortly in those new districts to which Settlement operations have been extended, and it is important that, if the new assessments are to be made on the principle advocated by the Commissioner of Settlements, that he be instructed accordingly without further delay.

No. 111, dated 1st June 1866, from R. EGERTON, Esquire, Commissioner and Superintendent, Amritsar Division, to the Secretary to Financial Commissioner, Punjab.

FORWARDS copy of a letter received from Deputy Commissioner of Gurdáspur, and requests instructions as to how such cases are to be dealt with.

Copy of a letter No. 156, dated 30th May 1866, from Deputy Commissioner, Gurdáspur, to the Commissioner and Superintendent, Amritsar Division.

I HAVE just received a petition from a land-owner to be excused paying the rate charged on revenue at irrigation by wells, because he has thrown his well out of gear and taken canal water, for which he pays separately.

I have replied thus :—

"It is not right that Government should lose revenue because you see a profit in taking canal water. If the Canal Officer will let you off the difference between baráni and cháhi rates, deducting it from the charge he would otherwise make, it is well, but if he will not, you must either pay his full charge or go without his water."

I report this because there will be many such applications, and because the men who have spent money on wells will in some villages be worse off than their neighbours who have not.

No. 2520, dated 12th December 1866, from J. A. E. MILLER, Esquire, Secretary to Financial Commissioner, Punjab, to the Settlement Commissioner, Punjab.

FORWARDS, in original, a docket No. 111, dated 1st current, from the Commissioner, Amritsar, with enclosures, and enquires whether, under the engagements made by him with the people during the present Settlement, land-owners can be exempted from paying the rate charged on revenue at irrigation by wells because they have taken canal water instead, for which they pay separately.

2. The Financial Commissioner would also be glad to be favored with any further remarks upon the general question he may wish to offer.

No. 410, dated Amritsar, 7th July 1866, from E. A. PRINSEP, Esq., Settlement Commissioner, to J. A. E. MILLER, Esq., Secretary to Financial Commissioner, Punjab.

IN reply to your No. 2520, dated 12th ultimo, I beg to forward, for the information of Financial Commissioner, the following observations :—

2. The whole question regarding the principle that has been pursued at this Settlement of assessing lands irrigated from wells by a separate water tax fixed according to the circumstances of position and depth in each well is apparently still under consideration. It was reported in my No. 41, dated 28th January 1865, but was not favorably received by Financial Commissioner, who recorded his views and referred the matter to Government.* As yet no final reply has come even to tell me whether the arrangements that have been carried out according to this principle in the new assessment of all three districts of Amritsar Division are to be accepted or not, though these Settlements are now over.

* No. 164, dated 17th March 1865.

3. It is for this reason that questions of the kind now referred have not so fully been provided for as I could have wished. All that has been entered in the jama engagements is to this effect : "The term is understood to be for 20 years. The jama is fixed in two sums—one on land, the other as 'ábiána' or water rate on wells. Such and such proposals have been submitted to Government. If approved, they will be carried out; if not approved, then the sum of the two jamas are to be considered as the one initial jama of the settlement. Until orders are received the 'ábiána' rate is to be considered fixed for the term of Settlement, as well as the jama on the irrigated area."

4. This is the way, expressed in general terms, I took the engagements. Before announcing the Jamas, the people were duly informed of the nature of the proposals sent to Government regarding the new system of water tax on wells. They were even told that it is probable these "ábiána" rates on wells applied only to such as were brought under assessment up to date. That hereafter if *new* wells were made, Government asserted to itself the right, when the engagements were taken, to apply the same rate as a constant unvarying rate for them also; that the rate had purposely been fixed light, leaving an ample margin for the play of capital in such improvements; and if the final reply of Government was to the effect of approving the system, then as new wells would come under future taxation at intervals and with given periods of grace every five years, so also the scheme permitted *remission* of the water tax wherever old wells collapsed *or became useless, on certain conditions to be hereafter imposed.*

5. As regards applications of the kind now referred, I have been quite alive to the necessity of providing for such cases as the owners of wells wanting to drop using their wells and taking to irrigation from canals, though as yet I have not entered provision to meet this class of exemptions on the engagements. I am of opinion exemption should be allowed only on certain conditions, and I now proceed to state what these should be.

6. Before I can make myself perhaps clearly understood, it will be as well to explain the system of assessment pursued in the case of such a well as is now under consideration, and how its position would be altered by canal irrigation.

7. The ordinary process has been to fix, say, on 20 acres attached to a well, the unirrigated rate of Re. 1-8, or whatever it may be. This gives Rs. 30. The water rate for wells usually falls at about Re. 1 an acre *per annum* in favored regions. Thus the water tax here would fall at Rs. 20 per well. The total jama would then stand at Rs. 50.

8. The owner after settlement wants to take canal water. If he took this he would be charged canal water rate at Rs. 2-6 an acre for the crop or half-year. This would give a revenue to Government of Rs. 47-8 instead of Rs. 10 for the *water* for the half year, and including the jama of unirrigated Rs. 125 instead of Rs. 50 if water was taken for the whole year. Thus Government gains Rs. 37-8 for the half year and Rs. 65 for the whole year, as the difference between the two irrigating systems.

9. My opinion is this—

(i.) That no irrigated land near a canal should be allowed to have water *from* the canal if there is a well in use and the land can be fully watered from the same, because the crops are sufficiently protected—

(1) by irrigation from the well;

(2) by percolation from canal, so improving irrigating power of the well.

(3) By dew, owing to proximity to canal.

The canal water is thus extended to meet the more urgent demands of countries lower down the Doáb, where no land can be irrigated except from a canal.

(ii.) That if this proposal is not approved, if all are allowed to have water on equal terms, then the following arrangement suggests itself to my mind as the easiest and safest when carried out in practice.

10. Let the well water tax be remitted, provided that the owner agrees to fill his well from the canal and then *raise for irrigation purposes.* This might be effected in most places by an under drain from the canal bank to the well. The owner would then pay at "jhallár" rates, or Re. 1 an acre per fasl. There would be no waste, no collusion by loading the well tax, and thus when a fine season comes no refusing to take water from the canal. Any such charges would be attended with much trouble and loss to both District and Canal Accounts, so it becomes obviously necessary to guard against such contingencies. By this plan, as the owner is under contract to take water by *lift* and not by flow, he could have as much water as he liked. The well would not be left to fall into decay. The water being nearer the surface, and there being more of it, cheaper cattle could be worked, and thus more revenue would come to Government, as it may be expected a larger area could be brought under irrigation and at less working expense.

11. If this plan were adopted, then the owner would have to enter into these conditions:—

(1). That he would agree to canal water for a term of years, and not from season to season.

(2). That he would take it by lift in this way, and not when it was flowing.

(3). That he would pay at "jhallár" rates Re. 1 the season per acre, and 2 if water is taken for both crops.

(4). That he could in this way use the well whether he could get the water from canal, or, the canal being closed, from the natural springs. It would only require that the well rope and buckets should be made larger for such perhaps rare occasions.

12. If he agreed to abide by these terms, then I see no objection to the well tax being exempted. But in all cases, District Officers should make out a list of such wells, and getting sanction of Commissioner to the reduction of well tax from the kistbandi, the well and former well tax should be brought on the registers of the Canal Officer. If the procedure was carried out in this way there would be no loss—there would be a positive increase in water revenue, which would be doubled as regards the average area usually watered when the well only was used (and upon which data the well tax is usually supposed to be made out); while there is a certainty of the owner bringing more land under irrigation which could not be reached by the well, from the fact that his working expenses are reduced, there being more water at his disposal, and the labor and cost of raising it being diminished.

13. The two chief objections to exemption of the well tax that naturally arise are (1) the chance of the owner being fitful in his wishes—one season preferring the canal, another falling back upon his well; to allow this would certainly cause much confusion in the accounts, much unnecessary trouble and microscopic changes of kistbandi, perhaps leading to evasion and loss; (2) on the other hand, the probability of losing increased revenue to Government, which will accrue if canal water is withheld *quoad* application of this kind. By the above plan it seems to me both objections are duly and sufficiently removed.

14. But, besides accepting this proposal as practicable, I believe it will be admitted to be sound and beneficial. It has long been urged by Canal Officers that there are lands near the canal, though watered from wells, which are directly benefitting from percolation and dews, and yet are assessed at unirrigated rates *quoad* this extra fertility that is thus created. This complaint will now be remedied in the plan above recommended.

15. I once came across a well which was thus affiliated as it were to the canal in a village near Ajnála. The water in it was always the same height as that in the canal. The supply was thus secure. The owner was paying at "jhallár" rates, and he assured me he found the plan answer all his purposes capitally; what was profitable and acceptable to him, it may be presumed, will be readily agreed to by others placed in a similar situation. At any rate, if parties come forward for exemption, I would let them have it on the above conditions and no other. If they did not like them they can carry on in their old way.

16. In other respects, *viz.*, taking it as a general question of comparative advantage to the country, the canal would gain in other ways by having more water to give to countries lower down which were not protected against drought, and '*cæteris paribus*' I am inclined to think this consideration is of far greater weight than the interests of a few individuals here and there who were quite in as good position as the land-owners in this Doáb. Though they wish naturally to improve their margin of profits, I do not see that Government, acting in behalf of the commonwealth, need go out of the way to make unsatisfactory arrangements, attended, perhaps, with the risks of alteration and trouble.

Enclosures are returned.

No. 3253, dated 25th July 1866, from the Financial Commissioner of the Punjab, to the Commissioner and Superintendent, Amritsar Division.

With reference to his No. 111, dated 1st ultimo, states that Financial Commissioner is opposed to the principle adopted by the Commissioner of Settlements in his revised settlements, under which the demand on well lands is separately assessed and regarded as open to revision during the currency of the settlement. The produce of well lands is *cæteris paribus* more certain than that of unirrigated lands, and there appear to be stronger reasons for revising periodically the demand on the latter than on the former. Pending, therefore, the orders of His Honor the Lieutenant-Governor, to whom the question was referred more than a year ago, requests that no reduction may be granted on account of wells which are thrown out of gear or otherwise rendered useless.

No. 343—3326, dated 2nd July 1868.

From—The Secretary to Financial Commissioner, Punjab,

To—The Secretary to Government, Punjab.

Well assessments.

Draws attention to this office No. 374, dated 25th July 1866, and conveys Mr. Egerton's views on the subject of well assessments as follows:—

The principal difficulty in sanctioning Mr. Prinsep's proposals regarding the assessment of ábiána on wells lies in the fact that whereas all new wells are exempted from ábiána under the special rules for promoting the construction of new wells (marginally quoted), the lands irrigated from old wells receive a remission of revenue when the old well is thrown out of work.

Circular No. 41 of 1850.

2. The remission proposed in the case of wells lying near canals when the proprietors cease to use the well and take water from the canal is covered by the rate for water advantage, the imposition of which has been recently sanctioned.

3. The Officiating Financial Commissioner does not agree to the remission first mentioned unless the orders for remission of enhanced demand from land irrigated from wells newly constructed is rescinded, and he is not able to recommend that it should be rescinded.

No. 469—4367, dated 26th July 1870.

From—The Secretary to Financial Commissioner, Punjab,

To—The Secretary to Government, Punjab.

Requests the favor of a reply to this office No. 164, of 17th March 1865, so far as relates to assessment of wells in recent settlements.

2. The question of assessment on canal lands has been settled in the correspondence relating to water advantage revenue, though the scarcely less important question of assessment on wells still requires the orders of Government.

3. The Settlement Commissioner urges the absence of orders on this subject as one of the reasons for the delay in the submission of his Settlement Reports.

No. 500—4701, dated 10th August 1870.

From—The Secretary to Financial Commissioner, Punjab,

To—The Secretary to Government, Punjab.

Ábiána on wells.

In continuation of No. 469, of 26th July 1870, asking for orders on the subject of ábiána on wells, draws attention to Settlement Commissioner's No. 41, of 28th January 1865, which states the question fully, and is not one of the papers returned with Government Nos. 508 and 509 of 19th July and 513 of 20th July.

2. Or if preferred, the letter above quoted and any others there may be connected with the assessment of wells, can be returned to this office, and the whole question will be resubmitted to Government in a complete form.

No. 576, dated Murree, 27th August 1870.

From—T. H. Thornton, Esquire, D.C.L., Secretary to Government, Punjab,

To—The Secretary to Financial Commissioner, Punjab.

Referring to the conference held yesterday on the subject of Mr. Prinsep's proposed system of assessing land revenue on wells * and the correspondence marginally noted,† I am desired by the Hon'ble the Lieutenant-Governor to forward copy of a note on the subject prepared by the undersigned and laid before the meeting, and to request that you will favor the Hon'ble the Lieutenant-Governor with your opinion on the following points :—

Present :

* The Hon'ble the Lieutenant-Governor.
Mr. Egerton, Financial Commissioner
Colonel Crofton, R. E.
Mr. Thornton, Secretary to Government.
Mr. L. H. Griffin, Under-Secretary to Government.

† Letter from Financial Commisioner No. 164, dated 17th March 1865.
Do. No. 169, dated 20th March 1865.
Do. No. 292, dated 24th May 1865.
Do. No. 374, dated 25th July 1866.
Do. No. 389, dated 2nd August 1866.
Do. No. 343, dated 2nd July 1868.
Do. No. 500, dated 10th August 1870.

2. *First.*—Whether the introduction of Mr. Prinsep's system is likely to involve loss of revenue.

In connection with this part of the subject, it will be desirable to ascertain whether in the districts of Amritsar, Siálkot, Gurdáspur, Lahore, Gujránwála, Gujrát, in which, His Honor understands, the system has been provisionally introduced, it has, *as a matter of fact*, resulted in loss of revenue ; that is to say, whether the assessments in those districts are lower than might fairly have been expected had the districts been assessed under the old system.

3. *Secondly.*—Whether Mr. Prinsep's system is calculated to be more popular and to give a greater stimulus to the development of the agricultural status of a district than the existing system, under which the constructors of new wells are free from enhancement of revenue for a period of 20 years.

In connection with this part of the subject, it will be well to obtain statistics showing the extension of well irrigation in the districts in which Mr. Prinsep's system has been applied, as compared with the extension of well irrigation in districts similarly circumstanced in which the old system is in force, and to adduce any other points which may be available to show the practical working of Mr. Prinsep's system.

4. In the event of Mr. Prinsep's system, in its present form, being shown to involve loss of revenue, whether it will be possible so to regulate the amount of water-rate as to secure the State a fair share of the profits of cultivation, now and hereafter, without neutralizing the advantages of the system.

5. *Thirdly.*—Whether much practical difficulty in carrying out Mr. Prinsep's system in its present, or a modified, form will result from the operation of Board of Administration's Circular above quoted, under which it is understood that a considerable amount of well-irrigated lands is exempt from enhanced assessment for a term of years. It has been suggested that the introduction of Mr. Prinsep's system, which protects the construction of a new well from enhancement for three years only, side by side with the system of the Board of Administration, which protects the construction of a new well for 20 years, will lead to misunderstanding and dissatisfaction.

6. The above appears to His Honor to be the main points for consideration, but there may be others, and it is accordingly left to the Financial Commissioner's discretion to bring forward and discuss any other points which he may consider to have an important bearing on the subject under reference.

NOTE.

Proposed new method of assessing Land Revenue on wells.

This proposal was made in 1865, and a good deal of correspondence has since taken place on the subject; but no orders were passed by the late Lieutenant-Governor.

The state of the case is as follows :—

Under the present system, when a settlement of land revenue is made, the total area irrigated by wells at the time of the measurements is ascertained, and enhanced rates are assessed on such area of greater or less amount, according as the lands are "constantly" or "occasionally" irrigated ; an "irrigated" jama is thus worked out, and this added to the jama of the unirrigated area constitutes the jama of the village ; this is fixed as a lump sum for the term of settlement, the distribution (*bach*) of this total sum being made by the villagers themselves. During the currency of settlement no enhancement of the jama is made, and during that period the villagers are left in undisturbed enjoyment of all the profits derived from the extension of irrigated or unirrigated cultivations ; while under any circumstances the constructors of new wells are exempted from increased rates for a period of 20 years.*

This system is objected to by Mr. Prinsep on the following grounds :—

1. Because there is great liability to error in the assessment *ab initio*, owing to—

(*a*) the difficulty in deciding whether lands are "constantly" or "permanently" irrigable ;

(*b*) the uncertainty of the criterion afforded by measurements made at one particular time : seeing that if made in a very dry season, the result is an exaggerated view of irrigated area ; if a rainy one, the irrigated area is under-estimated.

2. Because the rates are fixed without consideration of the class of *well*, the distance of water from the surface, &c., &c., but simply with reference to the fact of the area being irrigated ; hence great inequalities of the pressure of taxation not only in different tracts but in individual villages.

3. Because under the present system capital expended on improvements is unduly taxed, and Mr. Prinsep proposes in lieu thereof the following system :—

(*a*) To assess all village lands, whether irrigated or not, at unirrigated rates.

(*b*) To charge for each well a water rate, which is to be fixed in the following manner :—

Certain sections of country, generally a parganah, are to be taken. The fluctuations in depths of water from the surface are to be marked off in lines ; an average well is to be assumed for each tract within these fluctuations, with an average depth of water from the surface, an average irrigable area in an average year—a light rate is then to be fixed for the water, leaving a good margin for interest on capital expended.

(*c*) The water rate so fixed is to be fixed *in perpetuity* on each existing well, and (1) either levied on each new well built (after three years' grace), annually or at intervals of, say, five years ; or (2) if the inconvenience of assessing the water rate on new wells is considered an objection, the total of the well rates in a village should be declared permanent and the jama periodically redistributed over all the wells in a village.

* *See* Board of Administration's Circular No. 41 of 1850.

The advantages of this new system will, in Mr. Prinsep's opinion, consist in—

(1) reducing the inequality of taxation under the existing system;

(2) reducing the existing taxation of capital spent on improvements;

(3) giving a great stimulus to the construction of wells: while,

(4) if the first alternative is adopted, the initial sacrifice of revenue will be made up by the periodical increase of water rate levied on new wells.

To the system proposed by Mr. Prinsep, the following objections are urged by Colonel Lake (late Financial Commissioner) and others:—

1. That it is an abandonment of the fundamental principle on which our land revenue is based—a principle which it is important not to lose sight of,—which is that the land and the water belong primarily to the State, and that the State, as a sharer of the profits, is entitled to at least 50 per cent. of the *net* produce of the land, whether unirrigated or irrigated.

2. That the adoption of Mr. Prinsep's system will result in a large sacrifice of revenue both *initially* and *ultimately*, because—

(*a*) Mr. Prinsep's well rates are fixed on averages taken from large areas, whereas the *effect* of irrigation widely differs in different villages (*see* the table given in para. 4 of Colonel Lake's letter of 17th March 1865), where it is shown that whereas in one *chak* of the Amritsar District the difference between unirrigated and irrigated rates is 8 annas—in others it is 2 rupees; but an average rate fixed for a large area must be so low as to be not too heavy for the worst soils and most expensive wells, hence a large surrender of revenue is necessary; hence, also, it may be added great inequality of the pressure of taxation, the very thing which Mr. Prinsep desires to avoid.

(*b*) Again, although this surrender of revenue may be, to a certain extent, compensated by the rates levied on new wells constructed during the term of settlement, yet when irrigation has reached its limit this compensatory condition will cease and the State will be a loser in the long run.

(*c*) An essential part of Mr. Prinsep's systems is that the *rates* must be *permanently* fixed, but this is undesirable on the same grounds that in undeveloped tracts a permanent settlement is undesirable. There may be and probably will be a general rise in the value of produce, the result of the extension of communications; there may be and probably will be a fall in the value of money; * in either case a fixed *rate* for wells would result in sacrifice of revenue. Though the increased profits of the well owner not being the result of his own exertions, there is no possible reason why they should escape taxation, even if the principle be admitted, which all are not proposed to admit, that the Government is *not* to share in the profits of irrigation works constructed from private funds. In such cases the monetary capital is provided by private persons, but both the *land* and the *water*, which are portions of the capital, are contributed by the State.

(*d*) It appears to be very doubtful, to say the least, whether Mr. Prinsep's system will give a greater stimulus to the construction of wells than the present one, which secures the owners of new wells freedom from enhancement for at least 20 years; whereas under Mr. Prinsep's system the well constructor will be only secured against enhancement for 3 years.

(*e*) The system of *bach* or distribution of jama by the people themselves is interfered with by the authoritative fixation of *wells at* certain rates for specific lands, and village responsibility is thus weakened.

(*f*) Again, the carrying out of Mr. Prinsep's system is open to this grave objection, that large numbers of wells are protected for long periods from enhancement by the Board of Administration's Circular above quoted. Either, therefore, the provisions of this Circular must be set aside, which would be a breach of faith, or the two systems must be allowed to go on for some years at least side by side, which would lead to great confusion, to great inequality of taxation and loss of revenue to Government.

Lastly, the objection raised by Mr. Prinsep regarding "the taxation of capital" hardly holds good, when provision is made to secure the well constructor from enhancement of revenue for a long period, even if the principle be admitted (*see* objection 4).

Of those who have given their opinion on the subject, Sir Donald McLeod is in favor of Mr. Prinsep's scheme, except, I should think, the portion which assesses water rates permanently. Colonel Lake (the late Financial Commissoner) is opposed to it. Mr. Egerton appears to be in favor of it generally, but objects to setting aside the provisions of Board of Administration's Circular regarding new wells.

* A writer in the Statistical Society's Journal has shown that since the opening of the Australian Mines has fallen Rs. 18 per cent.

I am disposed myself to concur with Colonel Lake that the existing system (though there are doubtless defects in its application) is the soundest and safest, and while it secures for the State far more completely a fair share of the profits of cultivation, gives every reasonable stimulus for the extension of irrigation, is less harassing to the peoples, and does not, or at any rate need not, unduly tax capital laid out on improvements; at the same time many valuable suggestions for the improvement of the method of assessing well lands are contained in Mr. Prinsep's letter, and might be adopted, in whole or in part, in carrying out the present system. If Mr. Prinsep's system provided for securing the State an adequate share of the profits of irrigated land, and did not insist on the permanency of the well rates, there would be no objection to its adoption in a financial point of view, but I fear it would be unpopular. In its present form, it will involve a considerable sacrifice of revenue initially and ultimately—without, so far as I can judge, any adequate benefit.

Should, however, His Honor decide upon adopting the system proposed by Mr. Prinsep, I think it will be necessary to obtain the concurrence of the Supreme Government.

No. 72 S., dated Lahore, the 17th August 1871.

From—E. O'Brien, Esq., Offg. Secretary to Financial Commissioner, Punjab,

To—The Offg. Secretary to Government, Punjab.

Financial Commissioner's No. 5349, dated 8th September 1870.
Settlement Commissioner's No. 124, dated 16th September 1870.

In reply to your letter No. 576, dated 27th August 1870, I am directed by the Financial Commissioner to submit the papers marginally noted, and to convey the Financial Commissioner's remarks on the topics mentioned in paras. 2 to 5 of your letter above quoted.

Q. I.—Is Mr. Prinsep's system likely to involve loss of revenue?

2. Mr. Prinesp, in his letter which forms one of the enclosures of this communication, admits that the introduction of the new system of assessing wells has caused a reduction of revenue, but he has not furnished any estimate of the extent of this loss.

3. I am directed to forward statements, which have been compiled with some trouble, showing the estimated loss which has occurred from the adoption of the new system in the districts of Amritsar and Siálkot, and in parganah Gurdáspur of the Gurdáspur District. In estimting this loss, Mr. Egerton has assumed that the estimates made at settlement would be used for assessment only, and not for distribution of the Government demand in villages. Mr. Prinsep's arguments against the old system appear to be based upon the assumption that the area irrigated from wells as given by measurement, and the rates imposed upon such irrigated area, were used for the purpose of distributing the Government demand amongst the proprietors after the assessment was announced; but this was not, the Financial Commissioner believes, the rule in making the distribution. The principle followed has always been that the Settlement Officer made any calculations and estimates he thought fit, and announced the assessment; but the distribution was made by the people themselves, and only in the case of a dispute did the Settlement Department interfere. In this view the argument of unfairness used by Mr. Prinsep loses much of its force: for if there had been any unfairness in the estimate on which the assessment was based this would be remedied in the distribution after the people had accepted the asssessment fixed.

4. The amount which it is estimated has been lost under the new system in the Amritsar Division appears, from the calculations made, to be as follows in three districts of the Amritsar Division.

5. The statements furnished for the Gurdáspur District by Mr. Prinsep do not give the information on which the loss for the whole of that district can be calculated.

	Rs.
Siálkot	1,22,782
Amritsar	1,54,256
Gurdáspur Tahsíl	4,780
Total ...	2,81,818

Percentage of Loss.

Siálkot	15
Amritsur	29
Gurdáspur Tahsíl	11

In the statements furnished by Mr. Prinsep no distinction is made between canal-irrigated area and well-irrigated area; so that if under the head "Irrigated" in Statement V Mr. Prinsep includes well irrigation, Rs. 34,000 would have to be deducted in Amritsar from the total loss caused by the new system of well assessment.

Q. II.—Is Mr. Prinsep's system likely to be more popular, &c.?

6. No complete answer can be given to this question. In the absence of Government sanction the principle of taking a rate on wells newly constructed after settlement has not been carried out, and thus the portion of the plan by which its popularity can best be tested has remained in abeyance. There is no doubt that the reduction of the demand on lands irrigated from wells existing at settlement was popular, just as any other reduction would be. The statistics (statement annexed) show that the people in Jullundur have built more wells during the six years ending March 1870, and the Hoshiárpur people nearly as many as the people of Siálkot in the same period. In Gurdáspur there have been few new wells, as canal irrigation prevails there; and, for the same reason, there are probably few new wells in Amritsar, though the statistics of this district were not taken.

7. As far as can be judged from the information received, Mr. Prinsep's system has not been shown to be very popular, or to have stimulated the construction of new wells in any great degree, even though that portion of it which laid an assessment on new wells was in abeyance.

8. In paras. 4 to 9 of his letter enclosed, Mr. Prinsep has stated the way in which the loss of revenue caused by the new system may be retrieved.

The means are either—

1*st.*—To enhance the rate on wells; or

2*nd.*—To enhance the rate on land.

The second course is that recommended by the Settlement Commissioner for adoption. This, however, amounts to a revision of the whole assessment; and if this is to be done, it should be done thoroughly, and not merely with a view of saving some of the revenue lost by the new mode of assessment.

9. The Financial Commissioner considers that, as a temporary expedient, it would be better to raise the assessment on wells, which is the first alternative proposed; but Mr. Egerton's views on the whole question of the assessment of the Amritsar Division have been communicated to Government in my letter No. 70 S., dated 17th current.

Q. III.—What will be effect of the new system working side by side with the Board of Administration's circular protecting wells?

10. In para. 16 of his letter, Mr. Prinsep argues that there will be no difficulty in working the new system side by side with the Board of Administration's system of exemptions. He argues that the privileges conferred by that circular are little known or appreciated; and he instances the small amount of taccávi advances which have been taken as a proof of how little such privileges are valued. The figures given by the Settlement Commissioner regarding taccávi are quite erroneous. The total amount of advances taken since annexation as taccávi is more than 20 lakhs—a small enough sum, it is true, but not so small as the 4½ lakhs which Mr. Prinsep assumes to be the total. Protective pattahs are no doubt sparingly taken, and the reason for this is difficult to understand. It is probably in part, at all events, because the people are imperfectly informed regarding the privileges which Government allows to the constructors of new wells.

11. In the opinion of the Financial Commissioner it is not practicable to work the two systems side by side, that is to assess new wells, unless the owners take out protective pattahs, and to exempt those who do take them. Such a proceeding would of course make all constructors of new wells take out pattahs; for one of the reasons why comparatively few of these have been taken heretofore is, no doubt, that the new wells were not assessed until the term of settlement expired; whereas under the new system the pressure of the new assessment would be felt immediately.

12. The principle which Mr. Prinsep had in view appears, Mr. Egerton thinks, to be this—that it is unfair and impolitic to enhance the land revenue largely on account of improvements made by the expenditure of private capital. While admitting that this view is correct, the Financial Commissioner thinks that Mr. Prinsep did not consider sufficiently to how great an extent the system of protective pattahs and exemption of wells from enhanced assessments during the term of settlement protected the constructors of wells; and in order to carry out the idea more fully he has sacrificed revenue to an extent which was unnecessary, and has introduced a plan of separate assessment of wells which involves a departure from the principle, always hitherto followed, of allowing the people to distribute them over assessments.

13. In any revision of assessments which may be hereafter made, Mr. Egerton thinks that the plan of fixing the Government demand for each village in one sum should be followed, and that the distribution of this should be left to the people themselves.

14. In regard to the measures to be taken regarding the assessments of the Amritsar Division, I am to refer you to my letter No. 70 S., dated 17th August 1871.

Amritsar District.

No.	Name of Chak.	Cháhi Assessment. New Area. Old Rates.	Cháhi Assessment. New Area. New Rates.	Old Assessment. Revenue Rates.	Old Assessment. Jama.	New Settlement. Revenue Rates.	New Settlement. Jama.
				Parganah Amritsar.			
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	Nahri ...	34,205	21,399	63,746	62,031	51,635	57,231
2	Amritsar ...	27,908	18,945	60,005	60,537	60,428	58,740
3	Mìránkot ...	18,649	12,284	33,017	32,465	31,766	29,570
4	Jandiála ...	88,432	55,290	2,19,440	20,002	1,99,656	2,19,691
5	Bangar ...	13,743	10,434	54,852	55,262	47,695	50,851
6	Bhet Bangar ...	1,033	874	11,697	9,475	9,050	9,591
				Parganah Tarn Táran.			
7	Atari ...	11,056	10,341	19,159	17,487	24,255	18,443
8	Bangar ...	6,624	2,871	20,536	20,431	19,780	19,780
9	Upper Mánjha ...	62,814	35,337	1,04,229	1,01,559	97,672	97,611
10	Central Mánjha ...	56,686	38,613	1,04,407	103,889	1,09,961	1,04,947
11	Lower Mánjha ...	8,161	6,592	18,225	19,908	24,080	21,003
12	Bhet Mánjha ...	3,992	3,735	24 497	18,404	19,517	19,517
				Parganah Ajnála.			
13	Nahri ...	39,841	32,034	50,194	46,678	46,939	46,111
14	Rohiwála ...	25,886	16,043	25,245	21,895	21,758	21,159
15	Utarwála ...	61,264	41,695	67,050	63,053	63,955	57,885
16	Sukiwála ...	20,496	14,474	22,360	20,852	22,095	20,104
17	Silába ...	11,530	9,895	56,139	45,927	46,927	45,060
18	Hitrawála ...	34,776	19,948	54,308	44,643	41,251	41,904
	Total ...	5,27,096	3,50,804	10,09,106	9,65,578	9,38,420	9,39,198

(3.) 10,09,106

(4.) 9,65,578

10,09,106) 43,52,800 (4·31

40,36,424

31,63,760

30,27,318

13,64,420

10,09,106

3,55,314

(5.) 9,39,198

(6.) 9,38,420

778 = + 778

(1.) 5,27,096

(2.) 3,50,804

5,27,096) 1,76,29,200 (33·44

15,81,288

18,16,320

15,81,288

23,50,320

21,08,384

24,19,360

21,08,384

3,10,976

Difference between irrigated assessment, old and new = 33·44.

Difference per cent. between new rate and jama, old and new = 4·31.

Deduct 4 from 33, 29 remain.

Take 4 as ⅛th of 33, and deduct ⅛th from 1,76,292, and 1,54,256 remain.

No.	Name of Chak.	Cháhi Assessment. New Area. Old Rates.	Cháhi Assessment. New Area. New Rates.	Old Assessment. Revenue Rates.	Old Assessment. Jama.	New Settlement. Revenue Rates.	New Settlement. Jama.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	Darp (Pasrúr)	11,114	9,756	25,754	24,230	27,581	24,516
2	Degkandi (Pasrúr)	22,545	16,740	66,376	55,852	60,138	56,058
3	Charkari II (Pasrúr)	69,730	49,512	69,998	58,252	59,013	57,562
4	Pasrúr	10,228	10,149	48,570	50,754	52,783	50,549
5	Kálar	17,785	13,392	16,151	15,683	14,632	15,469
6	Bharari	6,576	6,594	38,286	37,362	45,635	38,560
7	Charkari (Siálkot)	1,16,380	93,847	1,13,781	1,09,937	1,02,581	1,04,757
8	Nianda	25,933	23,447	38,892	37,240	39,695	34,543
9	Bhet (Siálkot)	5,374	7,701	49,010	59,282	58,308	53,304
10	Chárwa	24,172	18,904	42,960	40,877	40,288	40,658
11	Tatatar	26,149	24,171	42,652	44,966	47,538	42,722
12	Degkandi (Zafarwál)	19,783	14,849	56,696	48,623	45,061	42,446
13	Dorhahi	7,277	5,967	31,101	27,506	27,917	25,303
14	Darp (Zafarwál)	17,878	17,113	46,937	43,712	45,142	42,720
15	Aikwála	51,540	45,582	49,497	45,710	48,018	45,175
16	Charkari I. (Daska)	1,11,224	84,084	99,421	85,399	85,626	83,356
17	Do. II. (Do.)	1,07,128	70,510	97,531	67,462	75,672	70,678
18	Bhet (Daska)	508	604	7,939	7,128	9,713	7,562
19	Vela	12,010	9,672	13,414	12,619	16,786	14,324
20	Darp	40,252	29,274	1,03,440	82,163	84,056	80,945
21	Degkandi Khás	18,168	13,187	34,436	25,162	28,178	25,800
22	Degkandi Kalur	30,097	23,966	41,863	29,162	29,781	29,350
23	Kalur Bangar	30,052	21,394	41,945	31,602	32,223	30,689
24	Kalur Khás	30,778	18,855	30,221	23,680	21,987	22,759
25	Khádir	17,470	16,708	68,420	51,658	62,527	51,888
	Total ...	8,30,151	6,45,978	12,75,291	11,16,111	11,60,279	10,91,693

(3.) 12,75,291

(4.) 11,16,111

12,75,291) 1,59,18,000 (12·48

12,75,291

31,65,090

25,50,582

61,45,080

51,01,164

1,04,39,160

1,02,02,328

. . 2,36,832

(5.) 11,60,279

(6.) 10,91,693

11,60,279) 68,58,600 (5·91

58,01,395

1,05,72,050

1,04,42,511

12,95,390

11,60,279

1,35,111

(1.) 8,30,151

(2.) 6,45,978

8,30,151) 1,84,17,300 (22·18

16,60,302

18,14,280

16,60,302

15,39,780

8,30,151

70,96,290

66,41,208

4,55,082

Difference between irrigated assessment, old and new = 22·18.

Difference per cent. between revenue rate and actual jama, old and new = 7.

Deduct 7 from 22, 15 per cent. remain.

Take 7 as ⅓rd of 22, and deduct ⅓rd from 1,84,173 leaves 1,22,782.

No.	Name of Chak.	Cháhi Assessment. New Area. Old Rates.	Cháhi Assessment. New Area. New Rates.	Old Assessment. Revenue Rates.	Old Assessment. Jama.	New Settlement. Revenue Rates.	New Settlement. Jama.
			Gurdáspur	*Parganah.*			
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	Mera Sailába	184	278	16,189	15,301	13,744	15,139
2	Bhet Rávi	6,000	5,940	34,893	31,880	24,928	28,682
3	Doshahi	58	31	25,340	22,921	22,117	22,116
4	Chitta Ráhi Byrámpur	1,665	2,003	21,186	20,097	21,152	19,753
5	Chitta Ráhi	2,126	1,443	12,277	11,099	10,063	9,948
6	Unkríkot, Santak Rai	9,243	7,388	26,338	26,369	25,402	25,507
7	Ditto Ooncha	3,011	1,065	35,523	34,111	30,159	33,111
8	Ditto Khás	1,432	1,403	43,406	39,300	37,026	38,151
9	Kiranwála	1,139	2,405	17,840	18,118	16,378	16,692
10	Tibbawála	16,477	11,737	53,170	46,851	42,113	44,651
11	Khaya Chumb	159	88	20,309	19,113	17,892	14,850
12	Bhaya	66	40	16,204	15,208	14,033	15,225
13	Bhet Biás	24	11	10,380	8,821	9,019	8,487
14	Ditto Chukí	60	29	4,491	3,785	2,770	3,201
15	Chumb	86	48	17,598	13,311	13,747	12,269
	Total ...	41,730	33,909	3,55,144	3,28,285	3,00,543	3,07,782

Gurdáspur Parganah.

(3.) 3,55,144

(4.) 3,28,285

3,55,144) 26,85,900 (7·56
24,86,008

19,98,920
17,75,720

22,32,000
21,30,864

(5.) 3,07,782

(6.) 3,00,543

7,239

(1.) 41,730

(2.) 33,909

41,730) 7,82,100 (18·74
41,730

3,64,800
3,30,840

3,09,600
2,92,110

1,74,900
1,66,920

7,980

Difference between irrigated assessment, old and new = 18·74.

Difference per cent. between revenue rate and actual jama, old and new— 7·56.

Deduct 7 from 18, 11 per cent. remain.

Deduct $\frac{7}{18}$th from 7,821·, and 4,780· remain.

Statement of Wells newly constructed or repaired in Six Districts of the Punjab from 1st May 1864 to 31st March 1870.

1	2	3	4		5		6		7	8	9
No.	Name of Tahsíl.	Number of villages in which new wells have been constructed or wells out of work restored.	NUMBER OF WELLS CONSTRUCTED OR REPAIRED.				*Total of columns 4 and 5.*		Number of wells which have become useless during this period for which new wells have been substituted.	Number of cases in which all protective pattahs have been granted for wells stated in column 6.	REMARKS.
			From private sources.		*By aid of Taccávi.*						
			New.	Repaired.	New.	Repaired.	New.	Repaired.			
	Umballa	103	41	20	30	12	71	32	25	42	The cost of these wells may be taken on an average of Rs. 400 each.
	Jagádhri	41	14	4	20	3	34	7	5	23	
	Rúpar	39	24	4	11	...	35	4	4	11	
	Kharar	96	71	22	2	1	73	23	8	3	
	Naraingarh	32	20	5	7	...	27	5	5	7	
	Píplí	89	32	11	24	22	59	33	10	46	
	Total ...	400	202	66	94	38	296	104	57	132	
	Phillour	125	383	9	42	1	425	10	16	...	
	Jullundur	249	562	46	104	7	666	53	67	1	
	Nawashahr	123	265	10	10	...	275	19	...	...	
	Nakodar	225	664	9	55	...	719	9	24	3	
	Total ...	722	1,874	83	211	8	2,085	91	107	4	
	Una	87	117	...	4	...	121	...	...	...	
	Dasúya	153	186	48	30	...	216	48	14	...	
	Garshankar	251	457	56	34	17	491	73	21	51	
	Hoshiárpur	228	254	105	42	6	296	111	45	...	
	Total ...	719	1,014	209	110	23	1,124	232	80	51	

Statement of Wells newly constructed or repaired in Six Districts of the Punjab from 1st May 1864 to 31st March 1870—concluded.

1	2	3	4		5		6		7	8	9
No.	Name of Tahsíl.	Number of villages in which new wells have been constructed or wells out of work restored.	NUMBER OF WELLS CONSTRUCTED OR REPAIRED. From private sources		By aid of Taccávi.		*Total of columns 4 and 5.*		Number of wells which have become useless during this period for which new wells have been substituted.	Number of cases in which all protective pattahs have been granted for wells stated in column 6.	REMARKS.
			New.	Repaired.	New.	Repaired.	New.	Repaired.			
	Siálkot	292	316	128	23	1	339	129	73	...	
	Pasrúr	262	283	208	15	1	298	209	94	...	
	Raya	495	394	133	5	...	399	133	96	...	
	Zufarwál	217	297	98	31	6	328	104	41	...	
	Total ...	1,266	1,290	567	74	8	1,364	575	304	...	
	Gurdáspur	26	10	25	3	2	13	27	5	...	
	Batála	155	180	57	34	3	214	60	10	...	
	Shakargarh	1	...	...	1	...	1	...	...	...	
	Pathánkot	...	...	...	...	...	...	...	...	...	
	Total ...	182	190	82	38	5	228	87	15	...	
	Gujránwálla	190	123	134	27	2	150	136	61	21	
	Wazírabad	155	81	45	48	9	129	54	56	...	
	Háfizábad	138	91	100	25	13	116	113	72	16	
	Total ...	483	295	279	100	24	395	303	189	37	
	GRAND TOTAL ...	3,772	4,865	1,286	627	106	5,492	1,392	752	224	

FINANCIAL COMMISSIONER'S OFFICE :
Dated Simla, the 17th August 1871.

E. O'BRIEN,
Offg. Secretary to Financial Commissioner, Punjab.

No. 124, dated Jullundur, 16th September 1870.

From—E. A. PRINSEP, Esq., Settlement Commissioner, Punjab,

To—The Secretary to Financial Commissioner, Punjab.

I LOSE no time in giving you my opinion, in a general way, in reply to your No. 5349, dated 8th instant, and its enclosures, from Government, on the question raised regarding the principle introduced in the revised settlements of assessing lands irrigated by wells by a light "ábiána" rate on wells over and above unirrigated rates.

2. That the system does involve the fixation of a less amount of revenue on *irrigated* lands than on what would have been taken under the old system does not admit of a doubt; its chief recommendation consists in this fact. That it must inevitably lead to a loss of revenue is far from certain; everything depends on the way a tract of country was assessed in former settlements. If the old principle of assessing by a "cháhi" rate the extent of lands recorded to be irrigated led to the erroneous inclusion of area as irrigated which in an average year would not be irrigated, or which is beyond the capabilities of a large number of wells to irrigate in a given tract of country, then undoubtedly the mistake must be rectified; and, as a *matter of fact*, the excess land erroneously assessed as "cháhi" would have to be computed, and the assessment be reduced to unirrigated rates. Over a large number of circles of assessment in which the area irrigated forms the largest proportion, no doubt the reduction to be effected might come up to a large figure; and this amount would have to the written off from the future assessments. But this, being attributable to a mistake of fact, should not be accepted as indicating a loss of revenue. It is only a surrender of what we ought never to have demanded.

3. After allowance has been made for this, whether in the three districts mentioned in para. 2 the system has, as a *matter of fact*, resulted in loss of revenue to any extent worth noticing, I cannot distinctly say. I will go through the statistical returns and submit a future report. I cannot give an accurate opinion just now, because I know we generally raised the unirrigated rates with a view to produce an appreciable equilibrium.

4. In reply to para. 4, it may be stated at once without delay that, even supposing the new system to have a tendency towards loss of revenue by reason of its reducing the pressure of past taxation on improvements effected by private capital, it *is feasible* to remedy this without neutralizing the advantages of the system. There are two ways in which it can be done, say, in a given tract of country, wherever it is established (and this can nearly always be established) that the greater portion of the tract has equal capabilities for irrigation comparing the past with the future, *viz.* :—

(*i*) Either by slightly raising the "*ábiána*" rate on wells; or

(*ii*) By distributing the reduced amount of past taxation on "cháhi" lands, so that it may be rateably assessed on *the entire cultivated land as if it was unirrigated*, by a very slight addition to the unirrigated rates.

5. Of the two remedial plans, I am strongly of opinion that the latter is to be preferred, for these reasons :—

(*a*.) That experience has shown the rateable distribution over all land, as if it was unirrigated, can be effected by even a light range of rates.

(*b*.) That, when so recovered, the burden of taxation falls on all alike.

(*c*.) That as all land unirrigated will some day enter the irrigated condition (wherever the capabilities are equal), the tax-payer of an estate not as yet irrigated has no particular ground for complaint for under the new system of Government loans for permanent improvement he will have special opportunities for bringing his estate into full development.

(*d*.) That equality of taxation is thus maintained without impairing the principle of affording every encouragement to works of irrigation under a system of light "ábiána" rates on wells—a principle the political importance of which can only be correctly appreciated in years of drought or scarcity of food.

6. That this modification can be effected is indisputable. If it is needed at all, it will only be needed in districts which are near the hills, where, owing to the rainfall being greater, water-supply in the underground reservoirs are more reliable, leading to a higher class of production. The well assessments have been expressed in former settlements by a higher range of "cháhi" rates. But it is in just these tracts where it would be quite legitimate to adopt higher rates on all lands in its unirrigated aspect, for the simple reason that production is easier and more secure, and districts are more safe from the effects of drought. It will be generally found that in seasons of scarcity from drought that come over a province those districts that are largely irrigated near the hills—say whose rainfall is above 20 inches in an average of years—are reaping large profits from the high range of prices; while districts, although equally irrigated (as far as extent of area is concerned), yet receiving water from the heavens below that average, are the first to suffer, as then unirrigated lands, more or less, are apt to fail.

7. This argument will show that the fear entertained would only be applicable to such districts as Gurdáspur, Amritsar, Siálkot, say half of Gujrát, half of Gujránwála, Ludhiána,

and Umballa, representing only six districts out of the 32 in the province. In the remaining districts, where the "cháhi" assessments were almost universally expressed by a *low* range of rates, my enquiries satisfy me there would be little to reduce from the old "cháhi" rate; so that in a number of districts now coming under revision of settlement the give and take would be such as to amount to no real loss of revenue as a whole. With care and arrangement in effecting the adjustments, I think we might even obtain an initial increase on the irrigated area as it now stands under the new system—say nothing of future revenue from new wells that will fall in.

8. This was not my opinion when we first applied the new principle, but as my work has extended over a larger sphere of country, and enquiry has enabled me to come to conclusions from a larger array of data, I think I may safely say this now.

9. The best criterion is that of appealing to figures. I will select twelve districts,—six near the hills, six away from good rainfall,—and, working out the matter, will lay it before you on a future occasion. It is not necessary to delay reply, as Financial Commissioner wishes an early expression of opinion.

10. The next question raised is whether the system is likely to be more popular and give a greater stimulus to improvement, and to judge of this you have been requested to obtain statistics. I fear it is quite too early for such enquiry; for the new system has not as yet had a fair trial. It has not been announced to the people that the new conditions of well assessment have been affirmed. It is not known that for new wells made Government is prepared to maintain the same light rates in a permanent way, or, granting that it is not desirable to accept the *permanent* principle, still that it guarantees these light rates so that they shall be constant, unvarying, and of general application, so as to affect all parties alike for a long number of years, which shall give the sense of security. Until this is done, it is hardly fair to compare it with the existing system of exemption from all assessment for 20 years.

11. Nothing of real value, then, is likely to be gained by merely asking for statistics of wells constructed during the last six years, beyond the mere fact of receiving a figured result.

12. That the plan is sure to be popular may be indicated by taking into consideration the following arguments :—

(*a*) The rating is a fixed rating on wells, not on area, which at best is a fluctuating quantity.

(*b*) It gives equality of taxation to all.

(*c*) If the rate is *light*, and fixed for a long period of years, although there is something to pay, it is known to be a light and fixed quantity.

(*d*) This gives a sense of security, which is the first essential to improvements of a permanent character.

(*e*) If pattahs are given on the old plan, they can be equally given under the new. There need be no harassing of the people from this procedure more than is now put up with.

(*f*) It amounts to exactly the same thing in the long run whether 20 acres are free from *cháhi* rate for 20 years, and then charged full rate of, say, Rs. 2 an acre more over and above unirrigated after that period for remaining period up to 50 years, or 20 acres are charged at a light and constant rate of Re. 1 an acre for 50 years. By the former Rs. 1,200 is obtained; by the latter only Rs. 1,000. In fact, the new system is a gain of one-sixth.

(*g*) There is a positive gain in the long run to the improving land-holder, while the State is yearly adding an increase to its revenues, which increase, for no purpose whatever, under the present plan, is thrown away for so long a period as 20 years!

13. If I was a landed proprietor, I know which of the two plans I should select. A light rate with certainty for 50 years would suit me better than nothing to pay for 20 years, and after that nothing fixed or known. May be I might be charged on an exaggerated area at rates that would barely encourage me to sink a new well.

14. At any rate, where by the one plan full accommodation and encouragement is given to enterprising agriculturists, and still a very large income will come into the treasury, I do not see why the State should forego that increase, though it comes in driblets for nearly a quarter of a century.

15. As to the third question in para. 5 of Secretary's letter, I do not think the difficulty referred to is of such a character that it could not be surmounted by any Government looking to its own fiscal interests in these days. However by all means the existing engagements entered into by the pattahs given under Board's Circular in respect of all promises for exemption from enhancement for a term of years. The new principle as regards them can be applied on the *expiry of the term*. They are not numerous—probably not 1 per 1,000 of all the wells now in existence. But for the future the circular can be withdrawn in each district as soon as a revision of settlement has been conducted on the new principle.

It is surely within the province of a Government, looking at a large question like this, to enforce an altered system of taxation where the old leases have expired and a new settlement is to be effected. In many parts the Board's Circular has scarcely had an appreciable effect: in remote parts it is not even known in the villages.

16. There is no fear of the change in system leading to "misunderstanding or dissatisfaction." I think Financial Commissioner will bear me out in this opinion. Look at the facts. We have held the province now for more than 20 years; the circular has been in force (from 1850) all this time; yet the entire amount of taccávi taken in six of the most highly irrigated districts does not aggregate more than Rs. 36,000 for the whole period, which would be enough to construct only 180 wells! In the whole province only 4½ lacs have as yet been taken, representing, say, only 1,800 wells. This would surely lead to an inference that the people have not as yet availed themselves of the facilities afforded them under our well-intentioned rules for bettering their prospects in this respect; for it is natural to conclude that if they had appreciated the Board's Circular they would have appreciated the advantage of taking loans as well. The uncertainty prevailing regarding our short-term settlements of ten years has, I believe, done much to produce this effect.

		Rs.
Gurdáspur	...	935
Amritsar	...	6,229
Lahore	...	7,883
Siálkot	...	7,712
Gujránwála	..	12,307
Gujrát	...	1,055
Total	...	36,121

17. I now pass on to notice the objections to the plan recorded in Mr. Thornton's clear and concise memo.

18. The fundamental principle he alludes to, "that the land and the water belong primarily to the State, and, as a sharer of the profit, the State is entitled to 50 per cent. of the net produce," has never been fully recognized regarding land brought under *irrigation* by *private capital*. At least this has never been actually asserted. On the contrary, in late days, Government has on several occasions sought to avoid the principle. I can point to four notable instances of this :—

(1.) A ruling of the Court of Directors requiring that, where improvement has been effected by private capital, regard should be had in fixing lighter rates of assessment. I cannot lay hands on the order to quote it, but think it is noted in Sahâranpur Settlement Rules.

(2.) The Fattehgarh Settlement in the North-Western Provinces has been revised, and regard paid to that direction.

(3.) The Bombay plan, which exempts altogether all wells so constructed from enhanced assessment, charging only at unirrigated rates, which is quite in the other extreme.

(4.) Letter of Government of India, No. 544, dated 8th June 1864, to Government, North-Western Provinces, containing instructions for a permanent settlement, where, in para. 23, it lays down this principle—"carefully to assess land possessing facilities for irrigation, with some advertence to this advantage, and by guarding the incidence of excessive taxation on wells already at work," which means no more nor less than that for irrigated lands. The 50 per cent. asset principle need not be followed.

19. Another objection is that well rates "fixed on averages taken from large areas lead to loss of revenue, and even inequality of the pressure of taxation—the very thing which it is sought to avoid, because the *effect* of irrigation widely differs in different villages." This can surely be obviated in the internal distribution by high, medium, and low rates on the land attached to the well when rated at unirrigated rates. The difference will be due to superior tillage and superior produce—in other words, to better soil; and, if it exists, is it likely the people will overlook it ?.

20. The next objection I do not quite understand, "that when irrigation has reached its limit the compensating advantages expected against present surrender of revenue from new income on new wells will cease, and the State will be a loser in the long run." How so? A tract is now assessed at Rs. 50,000, and only half the area is irrigated. Assume the initial surrender is Rs. 5,000 for 10 years, gives Rs. 50,000; after 10 years new wells are made, which raises assessment to Rs. 80,000; and in 20 years, say, the whole area has been irrigated, raises to Rs. 1,00,000. Is not the loss of Rs. 50,000 recouped by being doubled for all time after 20 years? How can there be the reality of a loss in this point of view? If the apprehension arises because my original proposal was to make the well rate permanent, I have no objection to drop the idea of permanence. There was a talk of a permanent settlement being inevitable in those days, and so the whole question was considered in that view; but no one will be more glad to learn that such an intention is abandoned. The well rate can then be for a long period—say 50 years, quite regardless of the term for which settlement is given. It can be declared liable to re-adjustment after 50 years with reference to the value of money in those days, and yet the feeling of security not be disturbed.

21. Then it is objected that "village responsibility will be weakened." I think not; for the unirrigated rates can be adjusted as they like with reference to soil or any other principle of internal rating which is had recourse to in the villages *bach*. But for the land improved by a man's own capital, and the great desideratum of water applied to land being secured thereby, surely, in a political point of view, it is proper to protect him. But does not

the same objection apply to the existing plan of entire exemption for 20 years? Might not the people more justly complain that village responsibility was more likely to be weakened by taxing to the full those who had the misfortune to improve before the settlement, and leaving any one to enjoy immunity for perhaps 30 years if he chooses to improve the year after new settlement?

22. The last objection shows that Mr. Thornton has not correctly understood my observation. What I said was that capital was unnecessarily and unequally taxed under the old plan. The assessment does not begin fair with all, which it ought to do. The provision to secure well constructors from enhancement of revenue for a long period only applies to such as have sunk wells during the last few years of our rule and to those who may improve hereafter. But what of those who have improved within the last 20 years, or the improvers of past periods, who *have never received the benefit of such concessions*, or who may be (and I can positively assert are) in many places paying for irrigation according to areas which do not get the benefit of a full amount of irrigation? Will not the old plan go hard with them?

23. Again, I do not see why it should be said that the new plan will necessarily harass the people. Surely they can take *pattah* for a light rate for 50 years, just as easily as one that gives them exemption for 20 years. The State need not be a real loser of initial revenue. If a larger share of the profits remains with the landholder, the State will surely benefit from it in other ways, and particularly in this important way, that, if greater encouragement is given to develop works of irrigation, more food is produced, and the country more quickly protected thereby against the disasters of famine. If the State does not obtain so large a share of the profits of cultivation, it obtains a sufficient share, can always look forward to an increasing revenue as the country improves, and cannot fail to gain in other ways that which will counterbalance the few disadvantages found to be against the system.

Memo. by J. B. LYALL, Esquire, Officiating Settlement Commissioner, Punjab.

I HAVE read the correspondence, regarding the new system of assessing land revenue on wells, which accompanies Financial Commissioner's letter No. 72, dated 17th August 1871, to Secretary to Government. The following is a way of comparing the new system with the old which has occurred to me.

Government is entitled to a share of the gross produce or half of the net assets—the same share on irrigated as unirrigated lands. But it is good policy to encourage irrigation.

One way to do so (the old system) is (1) to take nothing on new wells made within the term of settlement; and (2), over and above this, to give *pattahs* to makers of new wells, protecting them from increase on account of irrigation for 20 years, even in case revision of settlement occurs within that period.

Another way (the new system) is (1) to take on all lands irrigated by wells, old or new, not the full standard Government share of the produce, or of the net assets, but only its full share of the estimated baráni produce, or net assets, plus one-half of its share of the increased produce or net assets due to the irrigation, relinquishing the other half as a boon or encouragement to the well-owner; (2) not to give protection to new wells for whole term of current settlement, or for 20 years, but for two years, from sinking of the well only, and after that to assess the new well at the same rate as surrounding old wells. The question is which is the best system of the two,—*1st, for the encouragement of extension of irrigation; 2nd, in the interest of the Government revenue.* It seems to me that the old plan ought to encourage extension of irrigation most, if the natives understood it and relied thoroughly on our word (or rather our *pattahs*); for few men look much beyond 20 years—and 20 years' complete exemption is a great bait.

But, on the other hand, the immediate reduction of the assessment of the old wells would be the strongest proof of our intentions, and must have a great and wide-spread encouraging effect.

Perhaps the system would quite as much encourage as the old. Suppose them, then, equal in point of encouragement, and there remains the question, *which is best in the interest of the Government revenue?*

The new involves (1) a very considerable immediate and yearly loss of revenue in taking off old wells the half of Government share of irrigation produce or net assets, which has to be relinquished to the well-owner; (2) an eventual loss on new wells, for suppose all or most wells wanted in any tract will be made in the next 40 years, then 60 years hence, under the new system, Government will be getting less revenue on the new wells by half than if it had stuck to the old system.

On the other hand, the old system involves a total loss for the first half of the 40 years (in which half ⅔rds of the new wells would be made) of the increase which the new wells under the new system would give, and a partial loss during the last half. By the end of the last half, however, (if my calculations are correct,) Government would be getting about as much yearly income from the new wells by the old system as by the new, and thenceforward the old system would show an increasing yearly rise upon the new until the 60th year, by

which time the receipts under both systems in the whole of the past 60 years on new wells, if added up, would be found equal, and the yearly income from them under the old would begin to be double that under the new.

I think this is a fair account in all respects, except that it does not notice the fact that under the old system a well may remain exempt not for 20 years only, but for much longer.

For instance, suppose a man gets a 20 years' pattah some years before settlement, and the settlement is made for a long term of 20 or 30 years, there is no method in the old system for charging him for the well before the expiry of the term of settlement.

The second question therefore—which is best in interest of the Government revenue?—must, I think, be answered in favor of the old system. I agree also with Mr. Egerton in thinking it safest to leave it to the zamíndárs to assess the wells in the "bach." The new system produces an apparent equality, but much real inequality remains; for there are always differences between wells in the same village which are known only to the villagers.

Mr. Prinsep's calculations and statistics will, however, in my opinion, be of much assistance in assessing well-irrigated countries. His estimates for each tract of the area which an average well can irrigate, and the amount it ought to pay, will be very useful in testing irrigated areas and irrigated produce returns taken from the measurement papers.

I am inclined to think that neither the old nor the new system are altogether satisfactory. There seems something wrong in complete exemption for 20 years or more, followed by a sudden increase of assessment of from 125 to 200 per cent.

If Mr. Prinsep had given only half as much reduction as he did, I think his system might have been successfully defended. The Government might reasonably be asked to refrain in perpetuity from taking its full share of increased produce due to private improvements. It would be easy to alter Mr. Prinsep's system so far as to allow the zamíndárs to distribute among themselves the total amount assessed on a village as well jama.

Proceedings of the Hon'ble the Lieutenant-Governor, in the Department of Agriculture, Revenue and Commerce, No. 818, dated 14th June 1872.

READ—

Letter No. 124, dated 16th September 1870, from Settlement Commissioner, to Secretary to Financial Commissioner.

No. 72 S., dated 17th August 1871, from Secretary to Financial Commissioner, to the Secretary to Government, Punjab.

Memo. without date, by J. B. Lyall, Esquire, Officiating Settlement Commissioner.

RESOLUTION.—In 1865 the Settlement Commissioner introduced a radical change in the principle regulating the assessment of lands irrigated from wells. Such lands had theretofore been registered by the field surveyors, and specially rated in proportion to the value of their produce. They have since been rated equally with unirrigated lands of similar soil and natural advantages; whilst the well supplying them with water has been assessed at a lump sum considerably below the difference between the former irrigated and unirrigated rates. It was proposed that this assessment of wells should be incapable of enhancement in the future, but the Settlement Commissioner would now be content if it ran for a term of fifty years. It is a part of his proposal that all wells newly constructed within the term of settlement shall, after three years, come under assessment, instead of being exempt under the former system.

2. The theoretical object of this change was mainly to encourage the construction of new wells by limiting the assessment of land irrigated by private outlay. This object, abstractedly just and expedient, has, as shown by the Settlement Commissioner, at various times been authoritatively supported in different parts of India. In the Punjab the Board of Administration had aimed at its attainment by enabling the constructors of new wells to protect themselves for a term of twenty years against the imposition of irrigated rates by taking out a *pattah*, or lease. Statistics are wanting to show to what extent this privilege has been availed of.

3. A lesser object contemplated by the Settlement Commissioner was to obviate the errors incidental to surveys made for one particular year by adopting a low average valuation for all the wells having equal advantages within a certain tract.

4 Simultaneously, it was directed by authority that the Government revenue demand, calculated at the first settlement at two-thirds, should be reduced to one-half the assets or rental of estates. The opinion of the day, also, was strongly pronounced in favor of light settlements.

5. The proposals of the Settlement Commissioner have never received the sanction of Government, and have been only partially carried out in practice; for whilst the assessment of well-irrigated lands has been largely reduced, no compensation to the revenue has yet been made by the early taxation in the currency of the new settlement of wells newly constructed.

6. The Financial Commissioner (Colonel E. Lake) from the first objected to the change, on the ground that improvers were already amply protected by the twenty years' rule; that it was irreconcilable with the maintenance of the right of the State to a fixed proportion of the produce of the soil; that it would interfere with the free action of village communities in apportioning the revenue demand amongst themselves; and that it threatened to bring about a loss of revenue, present and prospective.

7. Sir Henry Durand, in August 1870, directed enquiry into the practical operation of the new system in respect of the above points, and the result is Mr. Prinsep's report, dated 16th September 1870, with the Financial Commissioner's commentary of the 17th August 1871.

8. Mr. Prinsep had not apparently the statistics necessary for a reply to Sir H. Durand's questions, and although he proposed to collect them, he has up to this time failed to do so. His defence of the system, therefore, still rests on his original argument. He acknowledges, however, that it inevitably involves a reduction of the revenue on well-irrigated lands, and suggests that this may be balanced either by enhancing the rating of wells or the rates of the whole unirrigated areas.

9. The Financial Commissioner has entered into calculations to show that the new scheme has caused a loss of revenue in the Siálkot and Amritsar Districts of 15 and 29 per cent., respectively. He considers that improvers can sufficiently protect themselves under the 20 years' rule, though, from various reasons, they do not appear to have taken out *pattahs* to the extent that might have been anticipated. He quotes the number of wells constructed within the last six years in the Jullundur and Hoshiárpur Districts, where the new system does not obtain, as proof that there is nothing in the present state of things repressive of the investment of private funds in agricultural improvement; and he considers that, whether the old or new system of rating irrigation be employed by the Settlement Officer, it is advisable to leave the interior distribution of revenue assessed on each village to the proprietors themselves.

10. The Lieutenant-Governor is of opinion that, although Mr. Prinsep's innovations were liberally designed, they are not necessary to the development of irrigation, and are financially disadvantageous. On the one hand, the reduction of the Government share of the assets of estates from two-thirds to one-half precludes, under skilful administration, the possibility of such over-assessment of the land revenue as would check the process of agricultural wealth; on the other, the special provision given to well sinking by the postponement for twenty years of the imposition of irrigated rates is taken in connection with the facilities given for obtaining loans from the State—a sufficient incentive to private improvers. He also agrees with the Financial Commissioner in thinking that the interests of improvers do not require the additional protection which Mr. Prinsep's system would necessitate by an interference with the interior apportionment of the revenue on the village shareholders.

11. In future settlements, therefore, the principle proposed by Mr. Prinsep will not be acted on.

ORDER—Ordered, that copy be forwarded to the Financial Commissioner for information and guidance.

No. 363, dated Calcutta, the 7th May 1874.

From—A. O. HUME, Esq., C. B., Secy. to Govt. of India, Dept. of Revenue, Agriculture and Commerce,
To—The Secretary to Government, Punjab.

YOUR letter No. 38 C., dated the 11th March, on the subject of the censure passed by the Government of India upon Mr. Prinsep in paragraph 4 of my letter No. 926, dated the 25th September 1872, and the subsequent explanations upon certain points submitted by that gentleman, has been considered by His Excellency the Governor-General in Council.

2. His Excellency in Council desires entirely to withdraw the blame which he attributed to Mr. Prinsep, for having, by delaying the transmission of his reports upon the settlements of certain districts in the Punjab, "compelled Government to sanction for ten years an inadequate assessment." It has been now shown to the satisfaction of the Government of India that the delay has not been the cause of any sacrifice of the land revenue, inasmuch as the settlements in question would (so far as the Governor-General in Council is in a position to judge) have been approved by the then Government of the Punjab, had they been reported at once.

3. The Government of India do not, as observed in my letter No. 123, dated the 12th February last, now desire to discuss further the question of the adequacy of these settlements, since they have already been sanctioned for the full term for which they had been announced.

4. In regard to the two points in respect of which Mr. Prinsep believes that he has grounds of complaint against the Government of the Punjab, *viz.*, the allegation that data were used by him in justification of his assessments which did not really form their basis, and the withholding from the Government of India of his letter to the Financial Commissioner, No. 66, dated the 9th September 1871, I am to say that the facts stated in your letter under acknowledgment have been attentively considered by the Governor-General in Council.

5. In reference to the first point, the Government of India readily accept Mr. Prinsep's denial that he ever furnished Government with any data but those which actually formed the basis of his assessments. I am to add that His Excellency in Council is of opinion that to call upon Mr. Egerton for the grounds of his statements upon this point, as requested in the 7th paragraph of Mr. Prinsep's letter of the 23rd September last, would only prolong a discussion which seems undesirable and unprofitable.

6. In regard to the second point of Mr. Prinsep's complaint, the Government of India observe that that officer's letter of the 9th September 1871, although not specially forwarded by the Government of the Punjab, was, nevertheless, duly recorded in full in the proceedings of that Government which were regularly furnished, and therefore was not withheld from the Government of India. It would, however, have been more desirable if the letter, being of the nature of an appeal addressed to the Governor-General in Council by an officer of the rank, and fulfilling duties of such importance as those of the Settlement Commissioner, upon a subject of controversy had been specially forwarded for the information of His Excellency in Council.

7. In conclusion, I am to state, for the information of His Honor the Lieutenant-Governor, that Mr. Prinsep has applied for permission to resign the Bengal Civil Service, and that, while unable to accept as satisfactory the explanation given by him of his reasons for not having submitted his Settlement Reports, His Excellency in Council desires to take this opportunity of expressing his appreciation of the ability and the hearty sympathy with the wants and welfare of the people which have been shown by Mr. Prinsep during his official career.

8. I am to request that a copy of this letter may be communicated to Mr. Prinsep who is now on furlough.

Endorsement by the Punjab Government.

No. 854, dated 21st May 1874.

Copy forwarded to the Secretary to Financial Commissioner, Punjab, for information.

No. 855.

Copy forwarded to E. A. Prinsep, Esquire, for information.

No. 883—5032, dated 27th July 1874.

From—The Secretary to Financial Commissioner, Punjab,

To—The Secretary to Government, Punjab.

With reference to his No. 854, dated 21st May last, submits a note by the Financial Commissioner on paras. 10, 11 and 12 of Mr. Prinsep's letter, dated 23rd September 1873, to the address of the Secretary to the Government of India, Agriculture, Revenue and Commerce Department, regarding the mode adopted by him for assessing lands irrigated from wells, together with an abstract of the correspondence which took place on this subject, the letters quoted in which are forwarded in original.

Note on paras. 10, 11 and 12 of Mr. Prinsep's letter, dated 23rd September 1873, to the Secretary to the Government of India, Department of Revenue Agricultural and Commerce.

Mr. Prinsep's letter, dated 23rd September 1873, to the Secretary to the Government of India, Department of Agriculture, Revenue and Commerce, was communicated to me officially for the first time on my return from leave at the end of April 1874.

2. A reply to the two questions raised in the letter from the Secretary to the Government of India to the Punjab Government, No. 123, dated 12th February 1874, was sent during my absence. In a subsequent letter No. 363, dated 7th May 1874, the Government of India has expressed itself satisfied on the two subjects of enquiry stated in the letter No. 123, dated 12th February 1874. I will not, therefore, enter into further discussion of the subject which relates to opinions expressed by me regarding the intermediate report on the assessments of the Amritsar Division and the statistics which accompanied it.

3. In paras. 10, 11 and 12 of his letter of September 23rd, 1873, Mr. Prinsep makes a statement regarding the mode of assessing lands irrigated from wells adopted by him, which requires some further explanation. With reference to my review of his intermediate report on assessment of land revenue in the Amritsar Division, with reference also to my letter No. 72 S., dated 17th August 1871, and to para. 30 of my review of the Lahore Settlement Report, Mr. Prinsep says :—

"Again an endeavour is made to show that the new procedure for assessing wells * * * had never been sufficiently sanctioned, that it was introduced by me without authority."

"To this I deem it to be my duty to reply that we certainly did act under authority;" and he proceeds to quote certain letters, reports, and other papers as some, amongst others, which he considers to be his authority for introducing the new system.

The question referred to me for report by Government in letter No. 199, dated 3rd April 1871, related to the nature of the assessment of land revenue in the districts, the settlement of which had been revised by Mr. Prinsep. I had to give an opinion whether these assessments were light or heavy, and in doing this it was necessary to notice a method of assessment which Mr. Prinsep stated when proposing it for sanction would involve a loss of revenue.

No question of the propriety of Mr. Prinsep's conduct in introducing a new method of assessment of land irrigated from wells was raised, nor was it intended to impute blame to him for his procedure in this matter.

But considering the nature of the subject for report, and the fact which was within my own cognizance, that official sanction to Mr. Prinsep's proposals had never been communicated to the Financial Commissioner, by whom the proposals of the Settlement Commissioner had been reported to Government, it was impossible for me to omit to notice the fact that such sanction had not been given. I believed that the question was still *sub judice*, that nothing had been done to bind the Government to one course or the other; and that on a matter which so materially affected the assessment, it was necessary to state what was really the case, not with a view to condemn Mr. Prinsep's action in introducing this method of assessment without sanction, but to show how the Government revenue had been affected by a method of assessment which was new, and which, though it had been submitted for the consideration of Government, had not been sanctioned by competent authority.

It was indeed impossible for any one who was called upon to report on the nature of the assessment to avoid noticing the fact, and I submit that if I had quoted the authorities which Mr. Prinsep has marshalled in his 11th para. they would not have been held to bind Government to any one of the three plans of assessing land irrigated from wells which had been proposed for adoption by Mr. Prinsep.

4. I do not deny that Mr. Prinsep introduced his system of assessing lands irrigated from wells, openly, and that his proposals were known to the Financial Commissioner officially from the date of receipt of his letter No. 41, dated 28th January 1865; but I consider that nothing but the fullest confirmation of his proposals by the Local Government was sufficient sanction and authority to introduce his new procedure of assessing wells.

This system involved—

(*i*) The abolition of the protection of new wells from enhancement of assessment granted by the Board of Administration in their Circular No. 41, dated 18th May 1850, and again reiterated by the Government of the Punjab in No. 1039, dated 17th November 1864.

(*ii*) As pointed out by Colonel Lake in his letter No. 164, dated 17th March 1865, to Government, a departure from the principle of assessing lands liable to pay revenue to Government at the estimated value of half the net produce.

(*iii*) The loss of a considerable sum of a land revenue.

(*iv*) A fundamental change in the mode of fixing and distributing the Government assessment of land revenue on villages.

5. The proofs of authority adduced in para. 11 of Mr. Prinsep's letter, dated 23rd September 1873, do not contain sanction to his scheme, and the correspondence which passed between Mr. Prinsep and the Financial Commissioner, of which an abstract is given below, and which is forwarded in original, shows not only that such sanction was not given, but also that Mr. Prinsep was aware that it had not been given, and urged the absence of sanction as one of the reasons for delay in submitting his final report on the assessment of the Amritsar Division. He had, no doubt, reason to complain that no official answer was given by Government to his proposals, but this does not justify him in asserting that the absence of such orders was sufficient sanction of the proposals themselves.

In his letter No. 12, dated 10th April 1868, to my address, shortly after I had assumed the office of Financial Commissioner, Mr. Prinsep wrote as follows:—

"There are three great questions still before Government, the subject of references made by me—

"(1). Canal water-rate principles.

"(2). Assessment of water rate on wells.

"(3). Tenant rights.

"I have desired to see these brought to some satisfactory conclusion before I finally submitted the reports, and I think it is not unreasonable on my part to demand that these questions be disposed of before I am called upon to send up the reports which are to treat of them.

"40. It is not that they affect a few villages here and there, or one or two parganahs only, for nearly every village is more or less affected by the two last, and the assessment of some 900 estates in two districts cannot be finally accepted nor the totals be made out until the further reference on the first question has been disposed of. * Improvement of the land revenue, comfort of the people, and the stability of our operations, depend on a proper and early decision of these questions. I may be excused, then, if I plead a desire to defer sending up my report until at least I am informed whether the action I have taken or wish to take regarding them has received the support of Government, which I have all along expected to receive."

In para. 48, Mr. Prinsep says, in apologizing for the length of the report:—

"I wished to place the entire particulars before Mr. Egerton in some way that he might learn easily all that has been done, the true position of affairs up to date, and the resonableness of the recommendations."

The Secretary to Government in his letter No. 481, dated 25th June 1868, replying to Financial Commissioner's letter No. 240, dated 28th April 1868, para. 4, replied:—

"The principle on which the enhanced land revenue accruing from canals and the assessment of the Government demand on wells are, no doubt, points very materially affecting the outturn of the settlement and delaying the final disposal of it; and it is a matter of regret to the Lieutenant-Governor as well as to Mr. Prinsep that these have not been decided upon at an earlier period. But both are subjects of much difficulty, in regard to which great differences of opinion exist, and the former has been, until a recent period, in a transition state.

* * * * * *

"The Lieutenant-Governor will now at once address himself to the latter, and hopes shortly to dispose of them."

In para. 22 of a memo. furnished by Mr. Prinsep to the Secretary to Government direct, with a docket, dated 27th February 1869, Mr. Prinsep remarks with reference to the delay which had occurred in submitting his final reports :—

"There still remains the third reference regarding *assessment of lands watered by wells*, a reply to which I expect to receive before I can fill up my remarks and explanations in the chapters which treat of assessments. I sincerely trust I may receive these orders at once, and as soon as they reach me, I trust I shall be able to complete and submit these reports by an early date."

In forwarding this memorandum to the Government of India with No. 354, dated 9th March 1869, the Secretary to Government said : "The only question which remains to be dealt with, causing further delay, *viz.*, that of the principle adopted by Mr. Prinsep, with the Lieutenant Governor's sanction, for the assessments of lands irrigated from wells, will be immediately disposed of."

It would thus seem that the Lieutenant-Governor, Sir D. McLeod, though he had in some way, probably unofficially, consented to Mr. Prinsep's proposals, yet he never at that time or subsequently gave his official consent to any one of the alternative plans set forth by Mr. Prinsep in his letter No. 41, dated 28th January 1865. The casual mention of the sanction here made is followed by an expression of intention to dispose of the subject, and cannot be considered to signify that final official sanction had been given to what had been proposed. Indeed, as Mr. Prinsep's report on the mode of assessing lands irrigated from wells contained three alternative plans, it was not possible to convey sanction without some discussion of them and stating which was to be adopted. It is obvious, also, that Mr. Prinsep did not think he had received sanction, or he would not have noticed the subject as one still awaiting orders in his memorandum on which the letter was written.

No official sanction was received by the Financial Commissioner before or after the letter quoted. The sanction alluded to must have been conveyed in some way with which the Financial Commissioner is unacquainted, and which was either unknown at the time to Mr. Prinsep or was considered by him insufficient.

Abstract of correspondence regarding the assessment of land irrigated from wells.

In his letter No. 39, dated 2nd March 1863, to Financial Commissioner, Mr. Prinsep, Settlement Commissioner of Amritsar, made proposals for a new method of assessing lands irrigated from wells. This was to ascertain and fix a moderate water rate sufficient to have full profit for the investment of capital, and at the same time to secure recognition of the right of Government to impose a tax on the water. In para. 15 of this letter, Mr. Prinsep drew attention particularly to the fact that if his proposal to assess all lands as unirrigated, and to charge on well-irrigated lands merely a small water rate, Government must be prepared to confirm what would be considered a large reduction of the land revenue on this account, which he estimated at Rs. 62,000, and perhaps more in the two districts of *Amritsar* and *Gurdáspur*. Financial Commissioner (Mr. McLeod) No. 866*, dated 14th March 1863, replied that "whatever our individual opinions may be in regard to the proper principle of assessing well lands, it is in my opinion wholly useless, and would be regarded as unwise, to propose to Government an abstract change of principle involving a large loss of revenue, and all that I would myself advocate in this matter would be that whatever increase Government may obtain from other sources, be granted to the owners of wells by a reduction of their rates of assessment. If, then, as your data for assessment accumulate, you can show that, owing to an increase of cultivation or an increase in the number of wells, any considerable increase of revenue will accrue to Government by applying existing rates, I shall be then prepared to submit to Government some definite propositions on the subject."

* This is the letter quoted by Mr. Prinsep as No. 1 of the proofs of authority given in para. 11 of his letter. The letter is, however, only partially quoted by him, and the full meaning of it will be seen from a perusal of the entire letter.

In No. 1097, dated 1st April 1863, Financial Commissioner (Mr. McLeod), in forwarding to Mr. Prinsep a letter from the Director of Canals, Punjab, asked if Settlement Commissioner thought it possible to devise a scale of demand for the water in wells when used for irrigation, regulated with reference to the distance of the water from the surface, abundance of supply, or any other tangible physical characteristics. Mr. Prinsep replied in his No. 123, dated 8th April 1863—he gave his opinion first upon the proper mode of assessing land irrigated from canals, and then replied regarding the method of assessing wells by a scale of rates.

The Financial Commissioner (Mr. McLeod), in forwarding this letter to Government, remarked in No. 253, dated 24th April 1863, in para. 2 : "I believe that irrigation from wells may with advantage be treated on the same principle,* but there is no urgent occasion at present for orders on this point, and I do not solicit any, as the subject is not yet ripe for disposal."

* That is "whatever enhancement of revenue shall be demanded in consequence of irrigation from the land shall be levied exclusively in the shape of water rent" (*see* Financial Commissioner's Selection No. 12)

The Punjab Government in No. 418, dated 12th May 1863, replied sanctioning the proposed method of assessing lands irrigated from canals, and with regard to lands irrigated from wells directed memoranda or notes which existed to be circulated for the opinion or the several officers and a few selected natives, and a report to be submitted, with Financial Commissioner's opinion, for the orders of Government.

Nothing decisive was done in the matter after receipt of the orders above noted. Mr. Prinsep, in acknowledging the receipt of the orders of Government last quoted, wrote in his letter No. 275, dated 22nd May 1863, as follows:—

"In deference to the remarks of His Honor the Lieutenant-Governor (Sir Robert Montgomery) in the concluding para., I shall discontinue to make any detailed calculations regarding the pressure of existing rates on well irrigation."

The Settlement Commissioner in his letter No. 41, dated 28th January 1865, immediately on Sir D. McLeod becoming Lieutenant-Governor, again referred the subject for orders in regard to the mode of assessing lands irrigated from wells as unirrigated. Mr. Prinsep in para. 1 of this letter says:—"The revision of settlement has advanced so far that it has become absolutely necessary that the orders of Government should be received disposing of the whole question."

He then proceeded to set forth three alternative plans for adoption:—

I. The plan adopted in párganah Baṭála of the Gurdáspur District, which was this: Certain sections of country were taken, generally one in each parganah. The fluctuations in depth of water were marked off by lines. An average well is assumed for each tract within these fluctuations; its depth and the average area irrigated in an average year are recorded. The sections are made out on an assumed base line laid down with reference to rainfall; a sliding scale is made out of the water rate proper to be charged for the wells in each tract as an average water jama to be applied to the number of wells in each village. It was ascertained that Re. 1 per acre was a just, equitable, and sufficient assessment for land watered from a well over and above the unirrigated rate. This plan it was stated would cause a loss of revenue, and, if the sacrifice could not be made, then the following plan was proposed:—

II. (1) That the water rates, after thorough enquiry and confirmation by Government, be declared fixed for ever.

(2) That if existing wells should collapse or become useless then the water rates shall be remitted till a new well is made.

(3) That after the settlement, whenever new wells are made and come into use (after a period of grace, say three years), the same rate as now-fixed for that village, and no more, will be fixed for the water.

(4) That separate *pattahs* be given to the holder of each well for his water rate, guaranteeing to him that as his unirrigated land is assessed permanently, so his water rate is permanent and not liable to enhancement by Government or in village Badih; that the *pattah* may be cancelled on the well collapsing; that a new *pattah* for a new well must be taken out if the same person wishes to secure his permanent interest, to have effect after the years of grace have expired.

The third plan was that proposed by Mr. J. B. Lyall, Assistant Settlement Officer. It was this:—

III.—To maintain the sliding scale system of water rates here pursued on all wells now in existence. To avoid future interference and taxation as from Government. To allow the village the benefit of periodical redistribution of the water rate jama on new wells after the expiry of the period of grace (three to five years).

Mr. Prinsep concluded his letter by asking the Financial Commissioner (Colonel Lake) to place the report with his opinion before His Honor the Lieutenant-Governor, that the Settlement Commissioner might have explicit instructions as to which of the three plans is to be adopted in regard to well irrigation assessment in the revision of settlement in the province. The letter is written in view of the possibility of the revised assessment being permanent, and it will be seen that from the fact of three alternative plans being proposed for choice, it was necessary that the orders of Government should be passed upon the Settlement Commissioner's Report. Colonel Lake, the Financial Commissioner, forwarded Mr. Prinsep's letter with his own opinion given in No. 164, dated 17th March 1865, to the Punjab Government. Colonel Lake opposed the proposals of the Settlement Commissioner. He pointed out that the fundamental difference between Mr. Prinsep and his supporters and those who opposed his views is that Mr. Prinsep does not attempt to take the value of half the net produce of land irrigated by wells. He showed how much the

irrigated rates of former settlements, which were paid with ease, exceeded those now proposed; that the former high rate had not, in the Jullundur Division, discouraged the construction of new wells. Colonel Lake considered that, so far from the old system being defective, he considered that the safest and most intelligible plan is to regard the land revenue as a tax upon net profit.

If the revenue taken from an acre of unirrigated land is half the net profit, the revenue paid by irrigated land should also be half the net profit. He considered the principle of the old system to be fairer than the new one, the effect of which he anticipated would be to give disproportionate relief to the owners of the best class of irrigated lands. He saw no reason for altering the principles of the old system of assessing lands irrigated from wells, because of the inequality of assessment it introduced between holders of irrigated and holders of unirrigated land.

He objected to the plans proposed by Mr. Prinsep on another ground also. If, he said, we interfere arbitrarily, and fix the proportion of the Government demand which irrigated lands shall pay, we weaken the principle of village unity and responsibility. Hitherto, he said, the plan has been for the Government officers to fix the total demand to be levied on each estate, and to allow the shareholders to distribute the demand amongst themselves as they thought fit.

This would not be done under the proposed system, and an error of calculation by the Settlement Officer might under the proposed plan cause great injustice to the holders of unirrigated land. Colonel Lake approved of the plan of fixing irrigated rates for land with due regard to the depth of the water in wells from the surface. He considered the returns of rainfall were not accurate enough to be a trustworthy basis for any but very general deductions. Of the three arrangements proposed for equalizing the demand on the shareholders of the village, he preferred that by which the demand payable by each shareholder was made liable to re-adjustment on the construction of new wells.

In conclusion, Colonel Lake acknowledged the pains and labor bestowed by Mr. Prinsep on the collection and preparation of statistics and diagrams.

In his letter No. 169, dated 20th March 1865, Colonel Lake added, as a further reason against the proposed plan, the diminution of the income of jágírdárs which would be thereby caused.

Mr. Prinsep again addressed the Financial Commissioner in his letter No. 161, dated 27th April 1865, pointing out that the principle laid down in Financial Commissioner's Circular No 79—3933 of 1864, regarding the exemption from irrigated rates of lands for which pattahs had been given under the Board of Administration Circular of 1850, was incompatible with the mode of assessing wells which Mr. Prinsep had adopted, and requested explicit instructions. In para. 5 of this letter Mr. Prinsep says to Colonel Lake: "You are aware that the principle which has been introduced by me, under full knowledge and approval of your predecessor in regard to taxation of well irrigated lands, requires that the water rate and land revenue be separately calculated, charged, and shown in my assessment papers." In the last para. he presses for early orders on his letter No. 41, dated January 1865, as if the principle of assessment he advocated was not approved, the whole of the assessment papers would require revision and the work would be much retarded. In forwarding this letter to Government, Colonel Lake remarked in his No. 292, dated 4th May 1865, to Government as follows:—

"I think it is due to Mr. Prinsep that he should be informed officially that His Honor the Lieutenant-Governor (Sir D. McLeod) was cognizant of, and approved of, the special measures taken by him in regard to the taxation of irrigated lands, and that as an experiment he be allowed to complete his assessments upon the principle adopted by him: thus the advantages of the two systems will be tested by actual experience. It is scarcely fair that the great responsibility of inaugurating and carrying out so radical a change in the assessment of lands should be thrown upon an officer of Mr. Prinsep's standing in the service."

The Settlement Commissioner again addressed the Financial Commissioner in a letter No. 202, dated 25th May 1865, and urged the necessity for early orders, stating that the measure he had proposed in No. 41, dated 28th January 1865, was calculated to secure greater equability of assessment in a settlement which, it was believed, was to be of a permanent character. In para. 3 he adds:—

"If, however, as I learn from a recent perusal of your report* to Government, that you are altogether averse to the system, then I think the question should be settled one way or the other, and without delay; * * * if the principle is not a sound one that has been advocated, then our operations should be stopped; if, on the other hand, it is approved of, we ought to be early informed, that there may be no further uncertainty in the matter and no further delay occur in applying the results of these new arrangements at the time when the village *khewats* are being prepared." The Financial Commissioner forwarded this letter with his No. 373, dated 10th June 1865, to Government, Punjab, and with his No. 2355 of the same date forwarded for Settlement Commissioner's perusal No. 292, dated 4th May 1865, of which an abstract is given above.

In No. 2520, dated 12th June 1866, the Financial Commissioner (Colonel Lake), forwarded to the Settlement Commissioner a reference from the Commissioner of Amritsar, and enquired if the charge on wells was remitted when the owners took canal water for their lands, and asked for further remarks if Settlement Commissioner wished to offer any.

Mr. Prinsep replied in No. 410, dated 7th July 1866, stating that the whole subject was referred in his No. 41, dated 28th January 1865; that the Financial Commissioner had not received the proposal favorably, that the matter had been referred to Government. He adds: "As yet no final reply has come even to tell me whether the arrangements that have been carried out according to this principle in the new assessment of all three districts of Amritsar Division are to be accepted or not, though these settlements are now over."

He states in regard to the engagements of the zamíndárs :—"All that has been entered in the jama engagements is to this effect. The term is understood to be for 20 years ; the jama is fixed in two sums—one on land, the other as *ábiána* or water rate on wells. Such and such proposals have been submitted to Government. If approved, they will be carried out ; if not approved, then the sum of the two jamas is to be considered as the one initial jama of the settlement. Until orders are received the *ábiána* rate is to be considered fixed for the term of settlement as well as the jama on unirrigated area."

In para. 4 Mr. Prinsep states what was explained to the people when the engagements were taken. They were informed that the matter had been referred to Government, and that certain results would take place if the reply of Government confirmed the proposals of the Settlement Commissioner. The rest of the letter is taken up with explanations of the Settlement Commissioner's views regarding the particular point referred.

The Financial Commissioner (Colonel Lake) sent on the correspondence to Government with his No. 374, dated 25th July 1866, and pressed for a reply to the reference made in No. 164, dated 17th March 1865, on the whole subject.

At the same time he wrote No. 3253 to Commissioner of Amritsar, saying that he was opposed to the principle adopted by the Commissioner of Settlements under which the demand on well lands is separately assessed and open to revision during currency of settlement. He adds : "Pending, therefore, the orders of His Honor the Lieutenant-Governor, to whom the question was referred more than a year ago, the Financial Commissioner requests that no reduction may be made on account of wells which are thrown out of gear, or otherwise rendered useless. The Commissioner of Amritsar made another reference, No. 159, dated 21st July 1866, regarding the manner in which new wells were to be treated and whether an exemption from enhanced assessment under the orders of the Board of Administration Circular of 1850 should be granted ; the question had been referred to Settlement Commissioner, who replied in his No. 881, dated 26th June 1866, that he had kept the vernacular file in the hope of receiving orders on his reference No 41, dated 28th January 1865, to Financial Commissioner, which had not been received ; that by his method of assessing a low rate had been fixed for all wells and should be applied to new wells constructed within the term of settlement ; and that the provisions of the Board of Administration Circular 41 of 1850 should cease to have effect.

The Financial Commissioner (Colonel Lake) forwarded this correspondence to Government with No. 389, dated 2nd August 1866, and again pressed for early orders on his former reference. Nothing further is on record on the subject until 1868, when the Settlement Commissioner forwarded correspondence for perusal with his No. 796, dated 31st January 1868, and was requested in No. 1327, dated 16th March 1868, to furnish full report on the subject of remission of well rates in the Gujránwála District which had then come under settlement.

In this file there is a note by the late Mr. Roberts, who was then Financial Commissioner, regarding the new system of assessing wells which Mr. Prinsep had introduced into Gujránwála. It is the only expression of Mr. Roberts' opinion on the subject which I can find. It was not officially communicated to Mr. Prinsep, but I give it here as evidence of Mr. Roberts' general view of the new system :—

" It is to be regretted that Mr. Prinsep did not report this beforehand and obtain sanction. I myself do not think that new wells should be assessed during the currency of a settlement, and remission for old wells fallen in should only be given when good cause is shown. Refer to Government."

This note is entered upon a note by Mr. Miller, Secretary to Financial Commissioner, dated 4th February 1868, but has no date of its own. Mr. Miller sent up the case to Mr. Forsyth, who acted for Mr. Roberts for a short time, and Mr. Forsyth directed the letter above noted No. 1327, dated 27th March 1868, to be written.

Mr. Egerton took charge as Financial Commissioner on 23rd March 1868.

Settlement Commissioner in reply to No. 1327, referred to his No. 410, dated 7th July 1866, but as this had gone to Government a copy was called for and furnished.

I addressed Government in No. 343, dated 2nd July 1868, and asked for orders on the subject of assessment of lands irrigated from wells, stating that the objection to Mr. Prinsep's proposed system was that it abolished the provisions of the Board of Administration Circular remitting enhancement of jama on wells newly constructed. Mr. Prinsep

appears to think I should not oppose his system, as I did not take exception to it before 1870. In reply to this, I observe that the correspondence had been sent up to Government three years before I assumed office, and was before a Lieutenant-Governor who had been Financial Commissioner for 13 years, with the opinion of another Financial Commissioner, and it did not occur to me that any expression of my opinion, uncalled for by Sir D. McLeod, was necessary, as he was in possession of full information on the subject. My opinion was asked in 1870, during the Government of Sir H. Durand, and I gave it after obtaining the satistics which were then called for.

In his annual reports for 1867 and 1868, Mr. Prinsep referred to the delay in replying to his reference regarding assessment of lands irrigated from wells as one reason why his final report on the Settlement of the Amritsar Division was delayed. He had previously mentioned this as a reason for delay in his letter to Financial Commissioner No. 12, dated 10th April 1868. Constant reminders were sent to Government during 1868-69-70, pressing for the decision of the question regarding the mode of assessing lands irrigated from wells, but during the government of Sir D. McLeod no reply was received, nor did Sir D. McLeod ever communicate to the Financial Commissioner his assent to Mr. Prinsep's view.

In 1870, during the incumbency of Sir H. Durand, a Conference was held at Murree, and the whole correspondence which had passed between the Financial Commissioner and Government was returned to me, with a letter from the Secretary to Government No. 576, dated 27th August 1870, and a note by Mr. Thornton reviewing the opinions which had been expressed on the subject of assessing land revenue on wells.

The whole of the correspondence which had been submitted to Government was returned, and my opinion asked on certain points detailed in the letter.

The Settlement Commissioner was addressed by me, and copy of the Government letter furnished to him. He replied in No. 124, dated 16th September 1870, and his letter was submitted with my No. 72 S., dated 17th August 1871, the contents of which are before Government and are within recollection.

Proof I.

With reference to Financial Commissioner's letter No. 866, dated 14th March 1863, that this letter when read in its entirety, does not convey the meaning which may be attached to the extracts from it which Mr. Prinsep has given*. Moreover the correspondence of which this letter forms part was closed by the orders of Government, Punjab, No. 418, dated 12th May 1863, and was admitted by Mr. Prinsep to be concluded in his letter No. 275, dated 22nd May 1863, to Financial Commissioner. Taken at its greatest value it amounts to an intimation of the general concurrence of the Financial Commissioner at that time in certain portions of Mr. Prinsep's views, and sanction is distinctly withheld until the submission of definite proposals.

* The Financial Commissioner's letter in full and as quoted by Mr. Prinsep are here placed in juxtaposition for easy comparison.

Proof II.

The minute of Sir D. McLeod quoted does not sanction any of Mr. Prinsep's proposals. He mentions a fact, which was no doubt well known, regarding what Mr. Prinsep had done, but he never sanctioned any of the plans proposed in Settlement Commissioner's No. 41, dated 28th January 1865, which is the letter containing the definite proposals regarding the assessment of lands irrigated from wells, nor did he sanction the settlements which Mr. Prinsep had made but had not reported.

Proof III.

Mr. Prinsep's own papers do not convey sanction to his own proposals. The paper he quotes, No. 24, which he states was sent up to Financial Commissioner in 1863-64, was written before the letter No. 41, dated 28th January 1865, was sent. It is not denied that his proposals were made sufficiently public.

Proof IV.

The subject of well assessment had been reported to Government, and the notice of what Settlement Commissioner had stated in an annual report is no sanction to detailed proposals of the nature described above.

Proof V.

Nothing written in 1862 can sanction proposals which were not finally made until 1865.

7. If the Financial Commissioner's letter No. 866 (Proof I) and the minute by Mr. Davies as Secretary to Government (Proof V) were sanctions, why was it necessary for the Settlement Commissioner to write his letter No. 41, dated 25th January 1865, and to urge the want of orders on the subject of assessment of wells as reason for delay in submitting his final report on the Settlements of the Amritsar Division? Why, also, did he consider it necessary to make his engagements for land revenue provisional? (*vide* his letter to Financial Commissioner No. 410, dated 7th July 1866).

The question was one of great importance: it involved great changes in an established system and also a considerable loss of revenue. It would not be sanctioned by the documents which Mr. Prinsep quotes as proof of sanction, and which he did not, so late as September 1870 (*vide* his letter 124, dated 16th September 1870), consider sufficient.

* See No. 72 S., dated 17th August 1871.

	Rs.
†Amritsar	1,54,256
Siálkot	1,23,782
Total ...	2,77,038

8. I have calculated* the sum which has been lost in the Amritsar and Siálkot Districts of the Amritsar Division from such data as were furnished me by Mr. Prinsep, and according to my estimate the annual loss in those two districts from the adoption of the new system of assessment of wells amounts to Rs. 2,77,038†. These figures have never been reported by Mr. Prinsep. The loss on a settlement for 20 years amounts to Rs. 55,40,760.

In his letter No. 124, dated 16th September 1870, Mr. Prinsep promised a complete report on the amount actually lost by the new system; but this report has never been furnished, and without some detailed calculations I am unable to accept Mr. Prinsep's statement that the loss is close upon 2 lakhs in three districts as convincing and conclusive upon the point.

9. In view, therefore, of the correspondence which has passed, I think I am not wrong in saying that Mr. Prinsep's new procedure for assessing wells was not sanctioned by Government or by any competent authority, and that in considering, as I was ordered* whether the assessments of the Amritsar Division were adequate or not, I was bound to notice the effect of this new system, and the fact that it had not been sanctioned. I forward a copy of this note for the information of His Honor the Lieutenant-Governor in order to show that I had good grounds for stating that the Settlement Commissioner's proposals for assessing lands irrigated from wells had not been sanctioned.

* Government, Punjab, No. 199, dated 3rd April 1871.

No. 1418, dated Lahore, 25th August 1874.

From—C. M. Rivaz, Esquire, Offg. Secretary to Government, Punjab and its Dependencies,

To—The Officiating Secretary to Financial Commissioner, Punjab.

The Lieutenant-Governor has carefully perused the note by the Financial Commissioner sent with your No. 883, dated 27th ultimo.

His Honor considers that the Financial Commissioner could not, in examining, as ordered by this Government, the bearing of Mr. Prinsep's assessments, have omitted to notice the method newly introduced by him of rating lands irrigated from wells, and the Lieutenant-Governor can find in your office letters on the subject no imputation of blame thrown upon that officer on account of his proposing for authoritative sanction the innovation which he deemed it advantageous to make in the practice previously obtaining. The Financial Commissioner has never denied that Mr. Prinsep fully reported all the details of his scheme, and the letter of this Government, No. 354, dated 9th March 1869, to the Government of India, proves that the Lieutenant-Governor, Sir Donald McLeod, had at some time or other accorded his sanction to it--probably, as Mr. Egerton observes, unofficially. It is not clear whether this sanction was given in his capacity of Financial Commissioner or of Lieutenant-Governor. It is, however, perfectly plain that neither Sir Donald McLeod nor Mr. Prinsep considered this sanction, in whatever form it was conveyed, sufficient official authority for the final establishment of the new plan of assessment; for the former intimated* to the Government of India "that the question still remained to be dealt with, and would be immediately disposed of"; and the latter almost simultaneously † stated that "he sincerely trusted that he might receive orders at once on his reference regarding assessment of lands watered by wells."

* 9th March 1869.

† 27th February 1869.

2. His Honor is of opinion that the Financial Commissioner has clearly demonstrated that none of the documents quoted by Mr. Prinsep as proofs of his having acted under authority in introducing his new system of assessment gave to it the official sanction necessary to its confirmation, and also that Mr. Prinsep was himself aware, when adducing these so-called proofs, that such sanction had not been given.

3. His Honor is further of opinion that no blame attaches to Mr. Egerton for not, unsolicited, as Financial Commissioner, expressing his opinion when this subject had been for several years, together with all the papers connected with it, under the consideration of the Lieutenant-Governor, Sir Donald McLeod, to whom the usual reminders were sent from your office; who had been addressed in the matter by Mr. Egerton's predecessor in forcible and urgent terms, and whose memory a question so important, and in the disposal of which he was known to be interested, could not be supposed to have escaped.

4. On Sir Henry Durand's assuming office the subject was at once brought before him in a note by the Secretary to Government, and, after reference to certain officers, a further report was called for from Mr. Prinsep, in rendering which, on the 16th September 1870, he wrote :—" It has not been announced to the people that the new conditions of well-assessments have been affirmed. It is not known that for new wells made Government is prepared to maintain the same light rates in a permanent way . . . . . Until this is done it is hardly fair to compare it with the existing system." It is scarcely necessary to point out that if the new system had been officially sanctioned no reason existed why the people most interested should not have been informed.

5. In the same letter Mr. Prinsep promised to make a detailed estimate of the loss to the State caused by his system, but he has up to this time failed to submit it. His Honor sees no reason to dispute the correctness of the Financial Commissioner's opinion that it exceeds $2\frac{3}{4}$ lakhs of rupees per annum in two districts only. In Mr. Prinsep's letter last referred to are the following observations :—

" In districts which are near the hills, where, owing to the rainfall being greater, water-supply in the under-ground reservoirs is more reliable, leading to a higher class of production, the well assessments have been expressed in former settlements by a higher range of '*cháhi*' rates. But it is in just these tracts where it would be quite legitimate to adopt higher rates on all land in its unirrigated aspect, for the simple reason that production is easier and more secure, and districts are more secure from the effects of drought. It will generally be found that in seasons of scarcity from drought that come over a province, those districts that are largely irrigated near the hills—say whose rainfall is above 20 inches on an average of years—are reaping large profits from the high range of prices, while districts, though equally irrigated (as far as extent of area is concerned), yet receiving water from the heavens below that average, are the first to suffer, as these unirrigated lands more or less are apt to fail. This argument will show that the fear [of loss of revenue] would only be applicable to such districts as Gurdáspur, Amritsar, Siálkot, say half of Gujrát, half of Gujránwála, Ludhiána and Umballa, representing only 6 districts out of 32 of the province. In the remaining districts, where the *cháhi* assessments were almost universally expressed by a *low* range of rates, my enquiries satisfy me there would be little to reduce from the old *cháhi* rate ; so that in a number of districts now coming under revision of settlement the give and take would be such as to amount to no real loss of revenue as a whole. With care and arrangement in effecting the adjustment, I think we might even obtain an initial increase on the irrigated area as it now stands under the new system—say nothing of future revenue from new wells that will fall in. This was not my opinion when we first applied the new principle ; but as my work has extended over a larger sphere of country, and enquiry has enabled me to come to conclusions from a larger array of data, I think I may safely say this now."

6. With reference to the above quotation, the Lieutenant-Governor observes that Mr. Prinsep's own statements show that there is no part of the Amritsar Division where the average rainfall is under 20 inches. Therefore the remission of $2\frac{3}{4}$ lakhs of rupees has been given in that part of the country which is least liable to drought, where the highest agricultural profits accrue in years of general scarcity, and where there is the least necessity to encourage by exceptional measures the construction of wells.

7. What financial effects might follow upon the extension of the same system to the Jullundur Division may be gathered from the following extracts from Colonel Lake's letter :—" Under former settlements irrigated lands paid rates in excess of those paid for unirrigated, varying not only in different districts, but in different villages in the same assessment circle. The additional rate paid for the advantages of water, which in the lower Mánjha, in the Amritsar District, was eight annas per acre, amounted in Bungah and Phurála in the Nawashahr Tahsíl of the Jullundur District to three rupees and three rupees eight annas per acre. The difference between the two systems is that whereas irrigated land in Phurála under the present system is assessed at five rupees per acre, Mr. Prinsep's plan would be to charge for it two rupees an acre as unirrigated and an additional

rupee an acre for water, making a total of three rupees an acre, and involving a reduction of two rupees for every acre of irrigated land. I will not assert that, with the view of equalising the demand with other parts of the country, some reduction may not be called for at the next settlement. At the same time, I can testify, from personal knowledge, that the villages about Phurála and Bungah are in a highly flourishing condition, and that the revenue has been collected without the least difficulty during the time I have been in charge of the Jullundur Division. I can also certify that the high rate paid for water has not discouraged the construction of new wells; for I find that out of 72 new wells constructed in tahsil Nawashahr during 1862-63, no less than 46 were in thána Bungah, throughout which high rates prevail for irrigated lands; and in the following year, out of 57 wells constructed in parganah Nawashahr, no less than 42 were in thána Bungah. I draw attention to these circumstances, because if the old principle were defective when carried to excess, as in these tracts, its mischievous effects ought to have been perceived by this time."

8. These considerations, opportunely suggested in the routine of his duty by an officer of Colonel Lake's ability and experience, were, in His Honor's opinion, deserving of examination. But the effect of the sanction extended by the Government of India to the settlements of the districts of Gurdáspur, Amritsar, Siálkot, Gujránwála and Gujrát, is to subject the treasury inevitably to whatever loss may be entailed during twenty years in those districts by the errors in this mode of assessment pointed out by Colonel Lake, and acknowledged to have occurred in its application by Mr. Prinsep. It appears to His Honor that the Financial Commissioner would have neglected his duty, when called upon to pronounce on the adequacy of the assessments, if he had failed to advert to the operation of the novel principles so strongly objected to by his predecessor in office.

9. His Honor thinks that he ought not, in conclusion, to refrain from noticing the imputation of personal inconsistency brought against him by Mr. Prinsep, who observes (paragraph 10) that "even Mr. Davies, when he was Secretary to the Punjab Government, submitted a *report* on the feasibility of a permanent settlement, approved of the policy, and strongly advocated it so recently as 1862-63." In paragraph 11 again he calls this paper "Mr. Secretary Davies' *minute* explaining how a permanent settlement could be carried out." Mr. Egerton has correctly stated that opinions expressed in 1862 could not possibly be understood as the official sanction to his measures expressly applied for by Mr. Prinsep in 1865 and subsequent years. His Honor also finds on looking at the document in question that it is not, and never was, a minute or report purporting to express his personal views, but is in the shape of a letter to the Secretary to Government in the Home Department in reply to a requisition of that office, and professes throughout to give the opinions of the Lieutenant-Governor, Sir Robert Montgomery, by whom it is initialed. It is not usual to fix upon a Secretary the responsibility of expositions made under the inspiration of superior authority; and His Honor might, if he pleased, dismiss the subject with this remark. But in truth the effect of the letter is most inaccurately set forth by Mr. Prinsep, and instead of being, as he represents, an unconditional recommendation of the system adopted by him, it merely advocates that, if contrary to Sir Robert Montgomery's views, the Government should resolve to introduce a permanent settlement into the Punjab; *in that case* he considered that it should be preceded by a reduction of the assessment on well-irrigated lands, because otherwise, on the future construction of wells entailing no increased revenue demand, great inequalities of taxation must necessarily ensue. Sir Robert Montgomery was not at that time called upon to pronounce on Mr. Prinsep's proposals, pure and simple. When, however, they were brought before him in May 1863, his reply was so little favorable that, in noticing it, Mr. Prinsep observed he was "quite disheartened"; and it is difficult to understand how he can assume to have received up to that time the sanction to his schemes of Sir Robert Montgomery's government.

10. Mr. Prinsep's system may have commended itself to the private judgment of Sir Donald McLeod, but it was never officially sanctioned by him in his capacity of Lieutenant-Governor. It did not meet with the approval of

Sir Robert Montgomery or of Sir Henry Durand. The detailed objections to it by Colonel Lake have never been replied to. It has not been recommended by Mr. Egerton, and the present Lieutenant-Governor has negatived its further extension. It has inflicted both on the Government and its jágírdárs an unnecessary sacrifice of revenue in the tracts of country least needing relief, and its continuation for twenty years under the orders of the Government of India has been resolved on for reasons extraneous to its justification.

A copy of the Financial Commissioner's note, and of this letter, will be forwarded for the information of the Government of India.

No. 820, dated Calcutta, the 25th September 1874.

From—Arthur Howell, Esquire, Deputy Secretary to Government of India,

To—The Secretary to Government, Punjab.

In reply to your letter dated the 25th ultimo, No. 1419, forwarding papers relative to the mode adopted by Mr. Prinsep of assessing lands irrigated from wells, I am directed to say that as the questions upon which the Government of India felt called upon to decide were disposed of in the letter from this Department, No. 363, dated the 7th May last, no further observations on the subject are now necessary.

2. These discussions show the great inconvenience and embarrassment which has resulted from important questions affecting the principles of the settlement of the land revenue having been permitted to remain either unsettled or only partially settled for many years, and the Government of India rely upon His Honor the Lieutenant-Governor to refer without delay, together with his opinion thereon, for the instructions of the Government of India, any similar questions which may arise in future.

3. This correspondence will be reported to the Secretary of State.

Endorsement by the Punjab Government, Revenue and Agricultural Department.

No. 689, dated 8th October 1874.

Copy to Secretary to Financial Commissioner, for information, in continuation of No. 1418, dated 25th August last.

No. 57, dated 19th November 1874.

From—The Marquis of Salisbury, Secretary of State for India,

To—His Excellency the Right Honorable the Governor-General of India in Council.

My Lord,—The despatch of Your Excellency in Council, dated 3rd October, No. 25 of 1874, transmitting copy of a letter, with enclosures, from the Government, Punjab, relative to the mode adopted by Mr. Prinsep of assessing lands irrigated from wells has been considered by me in Council.

2. It is perfectly obvious that Mr. Prinsep had no regular sanction for the introduction of his plan, and that his proceedings were characterised by great irregularity.

3. I fully concur in the remark addressed by Your Lordship in Council to the Government, Punjab, as to the great inconvenience, embarrassment of and loss which has arisen from important questions affecting the principles of the settlement of the land revenue having been permitted to remain either unsettled or only partially settled for many years.

4. I infer from these papers that the questions to which they refer did not arise during the Lieutenant Governorship of Sir R. Davies.

No. 1098, dated Calcutta, the 24th December 1874.

Copy forwarded to the Government, Punjab, for information, in continuation of the letter from this Department No. 820, dated 25th September last.

No. 52, dated 12th January 1875.

Copy of the foregoing forwarded to W. M. Young, Esquire, Officiating Secretary to Financial Commissioner, Punjab, for information, in continuation of No. 1689, dated 8th October last.

No. 467, dated Camp, 16th March 1874.

From—T. H. THORNTON, Esquire, D.C.L., Secretary to Government, Punjab,

To—The Officiating Secretary to Financial Commissioner, Punjab.

I AM desired by the Lieutenant-Governor to call your attention to the correspondence ending with His Honor's Resolution No. 818, of 14th June 1872, and paras. 28 and 29 of your letter No. 70 S., dated 17th August 1871, having reference to the system of well assessments introduced by Mr. Prinsep in the districts of the Amritsar Division.

2. By the recent orders of the Government of India, these assessments, although considered inadequate and involving considerable loss of revenue, will hold good for the term of 20 years, so that, if the statistics given in your letter are reliable, the aggregate loss of revenue in the three districts of Siálkot, Amritsar and Gurdáspur, resulting from the adoption of Mr. Prinsep's system, will amount *pro tanto* to upwards of half a million sterling.

3. Under these circumstances, I am desired to draw the Financial Commissioner's special attention to that portion of Mr. Prinsep's scheme which provides that all wells newly constructed within the term of settlement shall after three years come under settlement instead of being exempted under the system previously obtaining, and to enquire whether this provision has been duly carried out in the districts in which Mr. Prinsep's system is in force.

No. 57, dated Lahore 16th January 1875.

From—W. M. YOUNG, Esquire, Officiating Secretary to Financial Commissioner, Punjab,

To—The Secretary to Government, Punjab.

I AM desired to reply to your No. 467, dated 16th March 1874, regarding the system of well assessment introduced by Mr. Prinsep in the districts of the Amritsar Division. The reference was received while Mr. Egerton was away on leave, and a reply has only within the last month been received from the Commissioner of Amritsar, to whom your letter was referred for certain information ; so the subject, which is of considerable importance, has not until now come before him for disposal.

2. From your letter Mr. Egerton gathers that the Resolution of his Honor the Lieutenant-Governor, No. 818, dated 14th June 1872, while prohibiting for the future the adoption of Mr. Prinsep's system for assessment of wells, was not intended to dispose of the question in so far as it affected the districts of the Amritsar Division, the settlements of which gave rise to it ; and consequently that, in regard to these districts, as well as those of Lahore, Gujránwála, and Gujrát, where the system was also introduced, the system is to be maintained as originally proposed by Mr. Prinsep.

3. The Financial Commissioner much regrets that he should have misapprehended the intention of Government in this matter. He conceived that the resolution above quoted was to be held applicable to all cases of which it was at the time possible for Government to take cognizance ; the Amritsar settlements, not having received sanction when the resolution was issued, came under this category.

Accordingly in this office Book Circular No. 12 of 1872, of which a copy is enclosed, at paragraph 4, the Financial Commissioner issued instructions regarding the application of the orders to settlements completed and finally reported, the effect of which was to prescribe that the alterations involved in Mr. Prinsep's system should be disregarded. It is true that the orders of Government had at that time been received on the Lahore, Gujránwála, and Gujrát settlements, but paragraph 5 of the Resolution appeared to militate against the view of any sanction having been conveyed to the method of well assessments adopted in those districts.

4. Added to this, it appeared to the Financial Commissioner that one of the reasons which led the Government to shorten the term of settlement to ten years was the loss that was entailed by the well assessments—a loss which was brought into greater prominence by the impossibility of Mr. Prinsep's system being worked side by side with the system of protective *pattahs* inaugurated by the Board, and the consequent abandonment of that portion of the former which provided for the assessment of wells constructed during the currency of the settlement.

When the terms of the settlement were prolonged to 20 years by the Government of India, the aspect of the case was somewhat changed, but still the Financial Commissioner did not consider that any change was thereby involed as regards the position of Government in the matter of the well assessments; and the inference he drew from those orders was, that the Government of India was content to accept for 20 years the loss which the Local Government had accepted for ten.

By treating Mr. Prinsep's assessments as fixed for the term of settlement, it was possible to carry out the general orders for granting protective *pattahs*, and the Financial Commissioner did not understand that it was intended by Government that the plan of enhancing the Government demand on account of the construction of new wells, and of granting remissions on account of wells which fell into decay during the term of settlement, was sanctioned implicitly in the general sanction accorded to the settlement.

In his letter No. 410, dated 7th July 1866, Mr. Prinsep stated that the engagements had been framed in such a way that if his proposals in regard to assessing new wells were not approved, the sum of the two jamas, *viz.*, that on the land and that on the water, was to be considered as the one initial jama of the settlement, and it was therefore necessary that distinct orders of approval of one of the alternative plans proposed should be passed before any action could be taken in regard to the assessment of wells.

5. The Financial Commissioner feels himself called upon to make this explanation, as, in the view which is put forward in your letter, it would have been his duty to see from the first that no part of Mr. Prinsep's scheme should remain in abeyance which would in any way compensate for the loss of revenue involved in the system.

6. Before, however, taking action on your letter under reply, it is necessary to point out that Mr. Prinsep's proposals were alternative, and that definite orders will be required as to the mode in which effect is to be given to them. The proposals will be found among the enclosures to this office letters marginally noted, in which the orders of Government were solicited, and especially in Mr. Prinsep's No. 41, dated 28th January 1865, and No. 410, dated 6th July 1866, with the first and fourth of the Financial Commissioner's letters, respectively. As the settlements have received the final sanction of Government, the effect which can be given to the proposals is probably confined to the provisions entered in the settlement record; and sample copies of the tenders of engagement for each district are accordingly forwarded.

No. 164, dated 17th March 1865.
No. 169, dated 20th March, 1865.
No. 292, dated 4th May 1865.
No. 373, dated 10th June 1865.
No. 374, dated 28th July 1866.
No. 343, dated 2nd July 1868.

It will be best, perhaps, to direct that the terms of the tender of engagement and of the settlement record generally shall be followed. The sample copies of the tender of engagement, herewith forwarded, were called for for another purpose, and may not show properly the terms generally offered to the lambardárs who engaged for the revenue.

7. If it is the intention of His Honor the Lieutenant-Governor that Mr. Prinsep's system of well assessment in all its details should be applied to the six districts of Amritsar, Siálkot, Gurdáspur, Lahore, Gujránwála, and Gujrát, he would be glad to be furnished with explicit orders to this effect. The remaining points regarding which further orders are required, if this is the case, are:—

(1)—Whether the system of protective *pattahs* for wells newly constructed is to be maintained in any shape, and, if not, whether a period of grace of three years, more or less, should be allowed before the imposition of the Government demand on new wells?

(2)—Whether, in the case of wells fallen into disuse, the reduction of revenue consequent thereupon is to be secured to the proprietor of the well, as distinguished from the representatives of the village community who have engaged for the revenue, and, if so, in what manner?

(3)—If the system of assessment proposed by Mr. Prinsep is adopted, from what date should it be brought into force?

No. 775, dated 8th February 1875.

From—J. B. LYALL, Esquire, Settlement Commissioner, Mooltan and Deraját Divisions,
To—The Secretary to Government, Punjab.

I HAVE the honor to return a file of letters regarding Mr. Prinsep's system of assessment of wells. This file was made over to me by the Secretary to Government at camp Langar Serai for expression of opinion. I have written what I have to say on the subject in the memorandum which I enclose in this docket.

Memorandum by J. B. LYALL, Esquire, Settlement Commissioner, dated 6th February 1875.

THE question is whether it is advisable to cancel the orders contained in paragraph 4 of Financial Commissioner's Circular No. 12 of 1872, and to bring into complete operation Mr. Prinsep's system of assessment of wells in those six districts in which he actually introduced his system in part by assessing wells then existing at *baráni* rates plus a light lump-sum well *ábiána*.

My opinion is against so doing for the following reasons :—

I think it clearly undesirable to put the system in force retrospectively for the ten years of the settlement which have already passed. To do so would involve the demand of arrears for past years which the zemindárs would feel as a hardship, and with some justice, as the demand was not made year by year. Moreover, of those who have sunk wells in the last six or seven years, some would, I think, be protected by *pattahs*, and others would say, perhaps truly, that they believed that Mr. Prinsep's system had been disapproved of, or that they never heard of it, and that they did what they did in the belief that the old system was in force.

2. If Mr. Prinsep's system can only be put in force prospectively, then I think that the increase of revenue which it would bring in in the next ten years would not be great enough to make it worth while to annul the Financial Commissioner's Circular and to alter the old and approved system. Again, in spite of conditions entered in the settlement records of the six districts, I believe that only a very small proportion of the zemindárs at the present day know more of Mr. Prinsep's system than that he let off the wells lightly. If therefore we begin now to give only 3 years' grace instead of 20 and to tax wells within term of settlement, I think it possible that the ignorant popular view of the measure might be that the Government was getting less liberal and more inclined, on one pretext or another, to make increased demands within the term of settlement. This last is, I allow, a slight argument, but taken with the rest it has, I think, some weight.

3. Another reason of more force, if a fact, is, that the demand after three years, though light, would tend to sensibly check the making of new wells. I do not myself believe that Mr. Prinsep's system would in any case have proved as great an incentive as the old to the making of new wells; but its chance of succeeding as an incentive was lost when it was disapproved for general adoption, and not carried out at once in the six districts. For the attractive part of it was the light *ábiána fixed in perpetuity* or for *long terms of 50 years and upwards*: if the landholders could have been made to believe that Government had accepted that part of the system for good and all, they might have seen the advantages of it, but now it would be difficult to make them believe in the permanency of the light *ábiána* even if Government was prepared to adopt that policy permanently in the six districts.

No. 427, dated Lahore, 30th March 1875.

From—T. H. THORNTON, Esquire, Secretary to Government, Punjab,
To—The Officiating Secretary to Financial Commissioner, Punjab.

I HAVE laid before the Hon'ble the Lieutenant-Governor your letter No. 57, dated 16th January, on the subject of the system of well assessment introduced by Mr. Prinsep into the districts of the Amritsar Division.

2. His Honor the Lieutenant-Governor learns from your letter that the intention of this Government in regard to the course to be pursued in the case of those assessments has been misapprehended by the Financial Commissioner.

3. It was the Lieutenant-Governor's intention, when sanctioning Mr. Prinsep's assessments, that the sanction should embrace his system of rating lands irrigated from wells in its entirety, as by this means alone could the Government be in any way reimbursed for the initial sacrifice of revenue involved in the new arrangement; and hence in paragraph 11 of his Resolution No. 818, dated 18th June 1872, it was declared that "*in future settlements*" (not settlements now in force) "the principle proposed by Mr. Prinsep should not be acted upon."

4. As, however, the Financial Commissioner, in his Book Circular No. 12 of 1872, has issued instructions to a different effect under which Mr. Prinsep's low rates of assessment have been accepted, while it has been expressly declared (paragraph 4) that "no enhancement of assessment will be made during the period ofs ettlement on account of the construction of new wells," the Lieutenant-Governor deems it unadvisable to cancel or recall the orders passed.

No. 95 C., dated Simla, 22nd June 1889.

From—E. D. MACLAGAN, Esquire, Junior Secretary to Financial Commissioner, Punjab,
To—The Junior Secretary to Government, Punjab.

I AM directed to forward for the orders of Government a letter No. 282, dated 9th April 1889, with enclosures from Commissioner, Lahore, relating to certain enquiries made regarding the assessment of wells in the Gurdáspur District.

An unrevised proof of Part I of Financial Commissioner's Selection No. 38 (LXVI) is also sent herewith.
Return of all enclosures is requested.

2. It will be seen that the Settlement Officer of Gurdáspur, Mr. L. W. Dane, asks for an authoritative decision on two matters, *viz.* :—

(1). Whether in assessing well-irrigated lands in the Gurdáspur District he is to follow the system introduced by Mr. E. Prinsep at last settlement, and impose a lump abiána or water-rate on each well, instead of an acreage cháhi rate.

(2). Whether protective leases are to be granted to those persons who have constructed wells during the past 20 years, but have failed to obtain such leases.

3. Mr. Dane appears to feel some doubt whether the decision of the Punjab Government on the first of these subjects contained in Resolution No. 818, dated 14th June 1872, represents the views of Government at the present time, and refers to Financial Commissioner's Circular Memo. No. 25, dated 18th July 1887, as affording justification for this doubt. It appears to the Financial Commissioner strange that he should have any doubts on this subject. The definite order contained in paragraph 11 of the Resolution, that "in future settlements the principle proposed by Mr. Prinsep will not be acted on," has never been cancelled or modified, while only as recently as last year detailed instructions regarding the principles of assessment of land revenue were published with Financial Commissioner's Circular No. 37 of 22nd October, in the course of which the Settlement Officer is directed to frame "as many revenue rates as may be necessary to distinguish the main classes into which land is locally divided in respect to soil and system of agriculture, irrigation or want of irrigation, so far as such distinctions are clearly apparent in marked differences of value of net produce, or are clearly recognised in prevailing rent rates ;" and the rates are to be "so framed as to represent approximately the estimated average annual half net produce of an acre of each such class of land in the circle."

4. These instructions absolutely prohibit a method which does not involve the framing of "cháhi" rates If the Financial Commissioner's Circular Memo. quoted by Mr. Dane is read carefully, it will, the Financial Commissioner thinks, be observed that Mr. Douie's process, which received the approval of the Financial Commissioner, by no means contemplated that "cháhi" rates should not be framed, but merely contained (1) a method of verification, deduced from the application of those rates to the area actually irrigated; and (2) in certain exceptional cases a mode of distribution based upon the average irrigation of the wells of each village, in preference to a distribution in accordance with acreage rates.

5. The existing orders seem to the Financial Commissioner unmistakeable, and he does not, especially after all the previous discussion, recommend any reconsideration of these orders by Government. The reasons for which Mr. Dane recommends, and Mr. Rivaz supports his recommendation, that the system of assessing wells adopted by Mr. Prinsep should be maintained, are as follows :—

(1). That the people are used to it.

(2). That it prevents to a great extent the possibility of serious errors in the direction of over or under assessment.

(3). That it renders objections on the score of wrong classification of soils less frequent.

(4). That it affords less scope for fraud and chicanery on the part of subordinate revenue officials.

6. The first of these reasons is, the Financial Commissioner thinks, one which points to the conclusion exactly opposite to that framed by Mr. Rivaz and the Settlement Officer. The admitted deficiency in the well assessments of the last settlement constitutes one of Mr. Dane's greatest difficulties. It will be his duty to claim for Government a much larger proportion of the profits of well-lands at the present settlement. Mr. Dane points out, and justly, that there is nothing in the system itself to prevent his asserting the Government claim to the full. But the maintenance of a method which is associated in the minds of the people with an extensive relinquishment of the State's demand will greatly increase his difficulties, for it will permit of a direct comparison between the old and the new demand, and will keep out of sight the justification for a large increase in the well abiána. It is, the Financial Commissioner thinks, better in the interests of the task which has to be performed by the Settlement Officer that he should be able to appeal to the application of principles which are universally recognized as determining the State's demand than that he should come before the people with a largely increased demand, the steps for arriving at which are beyond their cognisance.

7. The other reasons are common to all settlement operations, and the minimization of the evils mentioned is a duty with which the Financial Commissioner is sure Mr. Dane is as competent to deal as his predecessors in the chapter of Punjab settlement history.

8. The Financial Commissioner is therefore unable to support Mr. Dane's first proposal, and he is most unwilling to allow that even a semblance of doubt exists in regard to the policy of Government on the subject. Mr. Young has dealt merely with his reasons for preferring Mr. Prinsep's system of well assessment, and has avoided the merits of the questioin, which in his view should be considered closed to discussion. But he would submit that Mr. Prinsep's plan was based upon the idea that it was wrong to tax the capital invested in wells by taking as large a proportion of the net assets of well irrigation as in the case of unirrigated land, and that the Government, having provided means for exempting this capital from taxation by protective leases, has declined to recognize the necessity for any further abatement of the Government demand on land irrigated from private wells on this score. It becomes therefore essential that the Settlement Officer should investigate the conditions of well cultivation, with a view to determining the value of half the net produce of an estate in accordance with the method prescribed by orders of Government, and this task he will no doubt have to perform to a great extent *de novo* in consequence of the method used by Mr. Prinsep at the last settlement.

9. If these views are approved, Mr. Dane is of course not precluded from making calculations, with reference to the cropped area actually irrigated from wells, to test the suitability of his "cháhi" rates. Nor in the Financial Commissioner's opinion is there any reason why, after his assessments are announced, the people should not, if they prefer it, so distribute the demand as to perpetuate the present mode of distribution, and the Settlement Officer will doubtless give any assistance that may be required in elaborating such a system of distribution. But the framing of the assessments from first to last should, in the Financial Commissioner's view, be conducted on the lines hitherto approved by Government, and not in accordance with Mr. Prinsep's method. At the same time the Financial Commissioner would be willing to instruct the Settlement Officer that although he should report the cháhi rates

for the assessment circles at the figure arrived at by calculation from the necessary data, yet, in view of the extreme lightness of the well assessment introduced by Mr. Prinsep, and the fact that for the last 20 years the people have enjoyed the benefit of this light assessment, it would be advisable for him to err on the side of leniency in their application to cases where the adoption of the system of cháhi rates instead of the lump-sum assessments of Mr. Prinsep's settlement causes an undue enhancement of assessment of the area irrigated by wells.

10. In regard to the second point referred by Mr. Dane, the Financial Commissioner agrees with the Commissioner. Mr. Rivaz has given excellent reasons, based upon the special circumstances of the case, for granting protective leases to persons who have constructed wells during the last 20 years, but have failed to get protection; and if the case of such persons be considered apart from all the circumstances of Mr. Prinsep's settlement, there is absolutely no equitable reason why their enterprise should not obtain the usual protection for 20 years. But the point was, in the Financial Commissioner's opinion, virtually decided by Punjab Government No. 427, dated 30th March 1875, by which the further proposal of Mr. Prinsep for the assessment of new wells after a period of grace of 3 years, more or less, instead of affording them protection for 20 years, was dropped. In this respect, therefore, the wells in the Gurdáspur District would have to be treated in the same manner as elsewhere, and the instructions contained in paragraph 23 of Financial Commissioner's Circular No. 39 of 1888, to the effect that "protective leases due, and not yet granted, should be issued, without regard to the circumstance that the owner failed to apply for such a lease when he made the improvement," should, the Financial Commissioner thinks, be strictly carried out.

11. In conclusion, I am to request the very early orders of Government in this matter, as Mr. Dane is hoping to submit his assessment report of the Batála tahsíl in time to admit of the collection of the new assessment in the kharíf of this year.

No. 282, dated 9th April 1889.

From—C. M. Rivaz, Esquire, Commissioner and Superintendent, Lahore Division,

To—The Senior Secretary to Financial Commissioner, Punjab.

I have the honor to submit copy of a letter from the Settlement Officer of Gurdáspur, No. 239 of the 3rd instant, soliciting orders as to what method is to be followed by him in assessing well-irrigated lands at the re-settlement of the Gurdáspur District now in progress. The question requiring decision is, whether the system of imposing a lump-sum as water-rate on each well, which was introduced by Mr. Prinsep at the settlement of 1865, is to be continued, or whether the former method of assessing the actual areas irrigated from wells at wet acreage rates is to be again resorted to.

2. Mr. Prinsep's new system of well assessment formed the subject of much controversy when his settlements of the Amritsar Division were under the consideration of the Financial Commissioner and Government, and Mr. Dane has succinctly summarized the orders which were eventually passed in the matter.

As regard the question now under reference, Mr. Dane represents that, notwithstanding the condemnation of Mr. Prinsep's system which was expressed in the correspondence above alluded to, it seems desirable to adhere to it in framing the new assessments, as the people have got accustomed to it, and are opposed to a return to the old system of irrigated acreage rates, and he points out that there is nothing in the system itself which need entail any loss to Government of the revenue fairly demandable from well irrigated cultivation, as an adequate revenue can be secured as much as under the acreage rate system, if the lump-sum per well is fixed for each assessment circle on a proper estimate of the irrigating capacity of the wells therein and the extra demand which such

areas can fairly bear in their irrigated aspect. In this view I concur. I discussed the subject with the people while lately marching in the Batála tahsíl, and found that, as Mr. Dane states, they are certainly in favour of Mr. Prinsep's system being continued. If this be sanctioned, the Settlement Officer will of course submit detailed proposals in his tahsíl assessment reports for revising Mr. Prinsep's well assessments, while adhering to his system, and for raising them, where necessary, as far as circumstances admit, to the proper standard.

3. A subsidiary point raised in the Settlement Officer's letter is whether protective pattas should be granted for wells sunk within the last 20 years. Mr. Prinsep contemplated a remission of the lump abiána he had fixed on wells falling out of use within the term of settlement, and an imposition of abiána at the circle rate on all new wells on their construction; but, for the reasons stated by Mr. Dane in his 14th paragraph, neither have such remissions been allowed on disused wells, nor charges imposed on new ones, though a condition to this effect was entered in the village engagements. It appears that, for some of the new wells which have been constructed within the present term of settlement, protective pattas have been granted; for others they have not, and Mr. Dane proposes, as I understand him, to now assess with abiána such new wells as are not actually protected by a patta, considering that this can fairly be done, since the condition to such effect in the engagement tenders is still in force. I am doubtful, however, whether under the circumstances of the case, and seeing that the contemplated remissions on disused wells have never been allowed, this proposal should be accepted. I think that a distinction can hardly be fairly made between wells which happen to have received a patta and those which have not. The orders contained in Financial Commissioner's Circular No. XIV of 1881 should, it seems to me, apply to all such wells alike, and I presume that, in the new settlement engagements, no condition should be entered as to remitting abiána on disused wells or imposing it on new ones.

4. I would beg that orders may be passed on this reference as early as possible, as Mr. Dane is at present engaged in preparing his assessment report for the Batála tahsíl.

No. 239, dated 3rd April 1889.

From—L. W. Dane, Esquire, Settlement Officer, Gurdáspur,

To—The Commissioner and Superintendent, Lahore Division.

I have the honor to report that the re-settlement operations in this district have now reached a stage at which it is very desirable to have certain questions connected with the method of assessing lands irrigated from wells authoritatively determined, and therefore beg to solicit orders on the following points :—

(*a*). The system of the imposition of a lump abiána or water-rate on each well instead of an acreage cháhi rate.

(*b*). The grant of protective leases for wells constructed during the past 20 years.

These are questions which must be determined before revenue rates can well be fixed, and as they affect the districts of Lahore and Amritsar in an equal degree, it appears to be more convenient to make a separate reference regarding them rather than to include them in a general assessment report.

2. You are doubtless aware that no reports on the re-settlements of the districts of Amritsar, Siálkot and Gurdáspur were ever furnished by Mr. Prinsep, then Settlement Commissioner, who was in charge of the operations. The reasons for this are given fully in the printed proceedings of the Punjab Government in the Department of Agriculture, Revenue and Commerce of June 1872 and subsequent proceedings; so that I need not enter into the question further here beyond mentioning that in 1872, *i.e.*, six years after the re-settlement of the district was concluded, the Punjab Government directed that, as the Government demand had been unduly reduced "owing to an inadequate estimate of the outturn and value of produce and to the diminution made in the rates assessed on land irrigated from wells," the settlement should only be sanctioned for a term of ten years. After acrimonious correspondence between Mr. Prinsep and the Financial Commissioner and Punjab Government these orders, at the instance of the Government of India, were so far modified as to extend the period to the term originally fixed by Mr. Prinsep. It appeared that he had received the

sanction of the Lieutenant-Governor, verbally communicated through the Financial Commissioner, to announce to the people that the settlement would run for that period. The view, however, of the Punjab Government as to the utter inadequacy of the assessment fixed in these three districts, which was concurred in by His Excellency the Governor-General in Council and His Grace the Secretary of State for India, was not modified in any way.

3. The main cause of the inadequacy of the assessment then considered to have been clearly made out was the change effected by Mr. Prinsep in the system of assessing lands irrigated from wells, which according to the Financial Commissioner's estimate resulted in a loss to Government of Rs. 2,77,038 a year in the two districts of Amritsar and Siálkot.

Acute controversy occurred as to whether Mr. Prinsep had ever obtained sanction to the introduction of the change, but eventually his new system was sanctioned in its entirety, owing mainly to the lapse of time which had occurred before the controversy was brought to a close.

4. Briefly summarized, the change consisted in imposing on each well in an assessment circle a lump water-rate instead of assessing the lands irrigated from wells at irrigated rates. The lump rate of abiána was fixed after taking into consideration the amount of rainfall in the tract, the depth of the wells, the strength of the springs, and the area ordinarily irrigable therefrom, and was estimated by Mr. Prinsep to amount to a rate of about Re. 1 an acre irrigated, over and above the ordinary rate assessable on the land in its unirrigated aspect.

5. He admitted that the introduction of the system was bound to result in an initial loss to Government, but he calculated that this would be far more than recouped by the stipulation which he inserted in all the owners' agreement papers (Ikrárnáma Málikán) that the abiána due on each old well falling out of work should be remitted, while an additional abiána at circle rates was to be imposed on each new well constructed during settlement. This arrangement, however, for reasons to be noticed hereafter, was not carried into effect, and the water-rates on old wells falling in has not been remitted; while no enhancement has been taken on account of new wells constructed during settlement. Consequently Government has had to bear the loss resulting from the inadequacy of the assessment, whatever it may have amounted to, during the whole period of 24 years which has elapsed since 1865, when the revised settlement came into force.

6. I feel therefore constrained to refer for orders before perpetuating a system which was not only condemned in the strongest terms by every Revenue authority in the Province, with the exception of Mr. Prinsep, the introducer, and probably Sir Donald MacLeod, but was also positively prohibited in the case of future settlements by Punjab Government Resolution No. 818 of 18th June 1872.

I do not suppose that I am called upon here to pronounce definitively upon the question of the adequacy of the assessment about which such high authorities differed, but I may point out that Mr. Prinsep's anticipations of a considerable increase during the term of settlement in this district owing to the rise in water-advantage rate revenue from the spread of canal irrigation and the normal increase in well water-rates which might be expected on new wells sunk were not realized, as the canal-irrigated area has been reduced from about 45,000 acres at settlement to 26,000 in 1887-88, and effect was not given to the agreements relating to the levy of abiána on new wells.

7. Since 1875, however, when the controversy about Mr. Prinsep's assessments was at last terminated, the system of imposing a lump water-rate on wells appears to have come into favour, and Financial Commissioner's Circular Memo. No. 25 of 18th July 1887 prescribes a somewhat similar system for adoption where the circumstances of the tract under settlement resemble those of certain portions of the Karnál District; so that the continuance of the present system in this district will probably not be condemned offhand on the strength of the previous orders.

8. Personally, I am of opinion that after the lapse of so many years, and now that the people have got used to the arrangement, it would be undesirable to resort to the old system of a cháhi acreage rate in its original form, as this would certainly give rise to all sorts of objections and petitions as to wrong classification of areas at the crop inspections, and thereby cause serious trouble.

9. Besides, the system was not in itself responsible for the great reduction in the revenue demand which undoubtedly followed its introduction into the Batála tahsíl and other portions of the district extensively irrigated from wells. What occasioned this was the rate at which the abiána was fixed, Mr. Prinsep purposely assessed well-lands at low rates to encourage, as he said, an extension of irrigation, and, as pointed out in paragraph 4, calculated his lump well-rate at Re. 1 an acre on the average area irrigable from a well in each circle.

In fixing his circle rates he went, however, considerably below the results that would have been obtained by adopting even this guide. I give below the rates assumed for the assessment circles in the Batála tahsíl as an instance of what occurred, as this tahsíl is the principal portion of this district, in which irrigation from wells is carried on to any great extent:—

Present assessment circles	Former circles included in present circles	Revenue Rates: Per well	Revenue Rates: Per acre dry	Result of Annual Returns: Years	Number of wells	Area irrigated, in acres	Average area per well	Abiána at Mr. Prinsep's circle rates	Water-rates leviable at Re. 1 per acre	Difference—plus, minus
		Rs.	Rs.							
Bet Bias	Bet Bangar	10	1 6 0	1885-86 ...	5	43	9	65	57 at Rs. 12 per well	—8
	Dhaia Bet	16	1 9 0	1886-87 ...	5	39	8			
				1887-88 ...	5	88	18			
				Total ...	15	170	35			
	Average ...	13	1 7 6	Average ...	5	57	12			
Bangar Batála ...	Ríarki	15	1 12 0	1885-86 ...	1,189	28,476	24	17,820	25,957 at Rs. 22	+8,137
	Rohí	13	1 8 0	1886-87 ...	1,179	20,396	17			
	Bangar Amritsar ...	18	1 10 0	1887-88 ...	1,197	29,000	21			
	Jandiála	13	1 8 0							
	Batála	16	1 10 0							
	Tibba	15	1 2 0							
	Dehriwála	16	1 8 0							
				Total ...	3,565	77,872	65			
	Average ...	15	1 8 3	Average ...	1,188	25,957	22			
Nahri	Nahri Nívi	20	1 8 0	1885-86 ...	1,002	27,692	28	17,982	25,409 at Rs. 26	+7,427
	Dehriwála	16	1 8 0	1886-87 ...	1,004	22,114	22			
	Nahri Khás	20	1 8 0	1887-88 ...	992	26,421	27			
	Bangar Hassu ...	18	1 4 0							
	Batála	16	1 10 0							
	Bangar Fatehgarh ...	18	1 4 0							
				Total ...	2,998	76,227	77			
	Average ...	18	1 7 0	Average ...	999	25,409	26			
Maira Kiran ..	Kiran	18	1 8 0	1885-86 ...	874	21,868	25	15,966	21,120 at Rs. 24	+5,154
	Bangar Fatehgarh ...	18	} 1 4 0	1886-87 ...	892	20,335	23			
	Bangar Hassu ...	18		1887-88 ...	896	21,157	24			
	Chhamb	18	1 9 0							
				Total ...	2,662	63,360	72			
	Average ...	18	1 7 0	Average ...	887	21,120	24			
Bet Rávi	Bet Rávi	20	1 8 0	1885-86 ...	429	7,028	16	8,580	6,859 at Rs. 16	—1,721
	Sailába Rávi	20	2 0 0	1886-87 ...	430	6,371	15			
				1887-88 ...	428	7,178	17			
				Total ...	1,287	20,577	48			
	Average ...	20	1 12 0	Average ...	429	6,859	16			
Tahsil	Average rates ...	17	1 8 4	1885-86 ...	3,499	85,107	20	60,413	79,402 at Rs. 20	+18,989
				1886-87 ...	3,510	69,255	17			
				1887-88 ...	3,518	83,844	22			
				Total ...	10,527	238,206	59			
				Average ...	3,509	79,402	20			

10. Moreover, he had apparently formed a preconceived idea of what a well could irrigate, and in his assessment notes in the village note-books never hesitates to reject the settlement statistics as to the well-irrigated area, if this differed from what he considered fair and proper. He seems to have entirely lost sight of the fact that in this district wells are not used as a substitute for a natural rainfall, but rather as a means of supplementing any unlooked for deficiency in that natural rainfall. By relying too much on the test of depth he also miscalculated the irrigable area; for in practice it is found that where water is near the surface, and wells can be constructed cheaply, more wells are sunk than where the cost of construction owing to the depth of the water is greater. This tends to reduce the average irrigated area in the first case; while as a rule in this district well water is most necessary where the springs are deepest, and so as large an area is covered as is possible in the second, subject of course to a certain prohibitive depth limit. The consequence is that he considerably under-estimated the average area irrigable from a well, and thereby of course largely reduced the total water-rate leviable on the well at Re. 1 an acre. His usual remark as to the settlement returns of 1852 is that the well area was grossly exaggerated, and therefore a large reduction in the revenue of the village must be given. It is curious, however, that the average of the crop returns for the agricultural years kharíf 1885 to rabi 1889 strongly bears out the returns of areas irrigated from wells arrived at in the first regular settlement, which are indeed corroborated by the returns of Mr. Prinsep's own measurements, which also he did not hesitate to reject. The average area irrigated per well in the Batála tahsíl according to our present returns is shown in the foregoing table as 20 acres per well; whereas Mr. Prinsep gives it in his assessment data as 12 acres only.

His rate of Re. 1 an acre, too, it may be noted, is less than what Mr. Douie proposed to apply in the Nardak, where he based his lump rate per well on a calculation of Re. 1-6-0 per irrigable acre over and above his dry rates. His average areas so irrigable are very low, but this is probably owing to differences of climate and situation in the tracts concerned. In the Batála tahsíl well irrigation expands enormonsly if there is a deficiency of rain at ploughing and seed times, and contracts, or is even altogether abandoned, in a year of abundant rainfall. The tendency in the crop statements also would be to under-state rather than over-state the cháhi area, as land to be returned as such has to be specially entered each harvest as cháhi, and if by an oversight the word is omitted, it is of course included in the baráni total.

11. There is no doubt a wide difference between the rates at which the assessment falls on land irrigated from wells in this district and in similar lands of probably equal capacity in the adjoining districts of Hoshiárpur and Jullundur. In Batála the average of the dry rates is Re. 1-8-4 an acre, so that according to Mr. Prinsep's calculation the wet assessment should be Re. 1 more, or Rs. 2-8-4 an acre; but according to the annual area returns the extra well assessment really falls at about 11 annas an acre only, except in the Bet circles, where, for the reasons noted in paragraph 10, Mr. Prinsep relatively, and even actually, over-estimated the average irrigable area. The average wet assessment may therefore be taken to be about Rs. 2-3-0 an acre against Rs. 5-8-0 in the Dasúya tahsíl, Hoshiárpur District, and in the Jullundur tahsíl. If, however, a lump water-rate was imposed on the average irrigated area at Mr. Prinsep's rate, this difference would be somewhat lessened, while at Mr. Douie's rate of Re. 1-6-0 an acre it would be considerably reduced. It must be borne in mind too that the high rates in Dasúya and Jullundur have been fixed since 1880 in districts where the well assessments have always been full, while Mr. Prinsep's rates of 1863 were based on a very low scale of assumed prices. They should therefore rather be compared with Mr. Davies' 1852 rates, which were Rs. 3-1-8 for Bangar Cháhi and Rs. 3-8-3 for Bet Cháhi over the greater part of the present Batála tahsíl.

Moreover, as Mr. Prinsep arrived at his circle abiána rates by a calculation of the average area irrigated per well in the circle, and then assessing that average area at an acreage wet rate, there is practically every little difference in reality between the two systems, and there is nothing to prevent us doing the same thing now and putting on an average water-rate on each well based on a wet rate per acre calculated sufficiently high to secure to Government a fair share of the increased renting value of land irrigated by wells.

12. I trust therefore that I have made it clear that there is nothing in the system itself to prevent the realization of a full revenue demand, and in view of the facts that the people are now used to it, that it prevents to a great extent the possbility of serious errors in the direction of over or under-assessment owing to a chance miscalculation of the irrigated area in a particular estate, and renders objections on the score of wrong classification of soils less frequent, while it affords less scope for fraud and chicanery on the part of the subordinate revenue officials, I would propose that it should be maintained, subject of course to such modifications as may be necessary to secure a fair revenue to Government.

13. The system of distributing the total sum demandable on account of well water-rate varies considerably. In pattidári villages it is almost invariably thrown in with the total dry assessment, and the gross sum thus obtained is distributed over the whole of the cultivated area in accordance with the shares on which the village is held, irrespective of the actual class of land held by the sharers.

In Bhaiachára estates this procedure is sometimes resorted to, sometimes the circle rates are charged on each well, and sometimes again the rates per well are modified so as to suit presumably the irrigating capacity and value of the well. This has not always been done fairly, but I do not anticipate that any serious difficulty will be caused in securing a fair distribution by wells based on the crop returns in cases where the people prefer to resort to this procedure instead of adopting the circle rates.

14. The second point on which I have to ask for instructions is this. Should protective pattas be given for wells constructed within the last 20 years in accordance with the general directions contained in Financial Commissioner's Circular No. 30 of 1881.

While sanctioning the assessment of Mr. Prinsep for a term of ten years only, the Lieutenant-Governor in Resolution No. 818 of 18th June 1872, directed that the principle of well assessment proposed by Mr. Prinsep should not be acted on in future settlements. In issuing these orders, however, the Financial Commissioner considered that they applied to the settlements of Gurdáspur and Amritsar as well as others, and in his Circular No. 12 of 1872 directed that new wells were not to be assessed during settlement. On a subsequent reference from Government in 1874, when inquiries were made as to what was being done towards giving effect to "Mr. Prinsep's scheme, which provides that all new wells newly constructed within the term of settlement shall after three years come under settlement," it appeared that, owing to Financial Commissioner's Circular quoted above, nothing had been done. On this the Lieutenant-Governor, as stated in Secretary's No. 427 of 30th March 1875, deemed it inadvisable to cancel or recall the orders passed by Financial Commissioner under a misconception, and Government had to bear the entire loss resulting from Mr. Prinsep's new system, without being able to enforce the arrangement whereby that officer proposed to more than recoup the initial reduction. Financial Commissioner's Circular has been again re-issued in Book Circular No. XIV of 1881 since the issue of the orders of Government above quoted in 1875, and, as matters stand, apparently pattas would have to be given.

15. Still in view of the serious consequences both to Government and to himself of Mr. Prinsep's action, taken, as it was held, without due authority at the previous revision of settlement, I think it necessary to point out that the non-enforcement of this arrangement, which is clearly set forth in the tenders of engagement, has entailed a considerable loss. The number of wells constructed since settlement in tahsíl Batála is 696, and of those which have fallen in, 358. There is therefore an excess of new wells of 338; and, though of course all of these were not built soon after settlement, many were so built, and at any rate the increase in income would have far exceeded the loss. The clause in the agreement has never been cancelled, though action thereunder has been suspended, and in the face of this no one can well contend that he was induced to construct a well in the hope of receiving a patta. It was quite within the competence of Government to abstain from enforcing this clause, but it is quite another thing to urge that the loss should be a continuing one on all wells recently constructed. The total number of pattas granted since the issue of Financial Commissioner's Circular No. 12 of 1872 and of wells constructed by takávi according to the district returns is given below.

No pattas were apparently given from 1865 to 1876. Full reliance cannot be place on the return, but it is useful as showing that the number of such wells is very small:—

Number of protective leases	32
Ditto wells constructed out of takávi	1

It will not, however, probably be considered desirable to cancel the pattas actually given, but perhaps Government may see fit to direct, now that the facts of the case have been fully put before it, that no fresh pattas should be granted, and that the owners of wells constructed during settlement must be content with the exemption from enhanced revenue under the terms of the tender of agreement which they have already enjoyed, and in doing this it appears to me that the requirements of equity would be fully complied with.

16. Lists of wells otherwise entitled to pattas have been prepared, but the issue of early orders on this point will possibly save a great deal of unnecessary trouble in Lahore and Amritsar, and also obviate further difficulties in this district in the calculation of progressive increments due on pattas falling in, and in other ways also. These points would doubtless have been referred before by my predecessor, but unfortunately copies of the correspondence referred to were not available in this office, and were only recently obtained.

17. Orders in regard to two points intimately affecting the assessment of land irrigated by the canal will probably be issued when the replies to your Circular No. 52 of 22nd current are sent in, on the subject of the imposition of a single occupier's rate in lieu of the present water-rates and water-advantage rates, and on the question of the so-called Chak Bandi system, whereby 25 ghumáos per well are exempted from water-advantage rates on the ground that they have been already charged with chábi rates. I need not therefore go further into this matter here.

I trust, however, that very early orders will be obtained in regard to the continuance if the abiána system of well assessments, as of course until this point is settled it is impossible for me to definitely propose the rates by which the gross assessment of the Batála tahsíl should be raised.

No. 189, dated 29th July 1889.

From—H. C. FANSHAWE, Esquire, Junior Secretary to Government, Punjab,

To—The Junior Sec etary to Financial Commissioner, Punjab.

I AM directed to acknowledge the receipt of your letter No. 95 C. of 22nd ultimo, and in reply to convey the approval of the Lieutenant-Governor to the instructions which the Financial Commissioner proposes to issue regarding the assessment of wells in the districts formerly settled under the orders of Mr. Prinsep.

2. It is necessary that revenue rates for well-lands should be fairly worked out in the usual way under existing orders, though with special caution to be on the right side. But in using rates for actual village assessments in the districts under reference the assessing officer, as pointed out by the Financial Commissioner in paragraph 9, may properly go below what they bring out, because of what was done at last settlement and of the light assessment of well-lands which the people have been enjoying for over twenty years.

NEW SERIES—NO. 12.

SELECTIONS FROM THE RECORDS

OF THE OFFICE OF THE

FINANCIAL COMMISSIONER, PUNJAB.

Published by Authority.

No. 38.

CONTENTS.

Lahore:
THE CIVIL AND MILITARY GAZETTE PRESS.
Contractors to the Punjab Government.
1889.